

**2015 Michigan Dairy Farm Business
Analysis Summary**

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by

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Summary

This report summarizes the financial and production records of 89 dairy farms from across Michigan in 2015. To be included, the farms must have produced at least 50 percent of gross cash farm income from milk and dairy animal sales. The records came from Michigan State University's TelFarm system and the Farm Credit Service system in Michigan. The average values of financial performance are reported. The average herd included here is larger than the average dairy herd in Michigan. Average values are reported in the summary tables and discussion that follows but one should be aware that considerable variation across herds exists in virtually every measure. In 2015, the average dairy farm in the business analysis had 338 cows producing an average of 24,394 pounds of milk per cow (Table 1). Milk price, based on gross milk income, averaged \$17.06/cwt.

Table 1. Average Michigan Dairy Farm Business Analysis Characteristics, 2011-2015

	2011	2012	2013	2014	2015
Average number of cows	303	291	271	306	338
Milk sold per cow (pounds)	22,340	23,148	23,992	23,007	24,394
Average price of milk sold (\$/cwt)	20.65	18.67	20.53	24.18	17.06
Total acres owned	452	486	479	456	505
Total crop acres	736	883	895	909	928
Number of farms	101	92	76	86	89

Net farm income is the return to operator unpaid management, labor and capital invested. Net farm income in 2015 averaged \$84,765 which was a \$369,680 decrease from 2014. Gross cash farm income for all farms averaged \$1,937,891. The largest component of these revenues was milk sales, which averaged \$1,476,954. Sorted by rate of return on assets (market), the net farm income for the low 25% group averaged a negative \$93,297 while the high 25% group averaged \$277,046.

Table 2. Average Michigan Dairy Farm Income Statement, 2011-2015

	2011	2012	2013	2014	2015
	(\$)	(\$)	(\$)	(\$)	(\$)
Gross cash farm income	1,742,837	1,701,956	1,767,942	2,133,396	1,937,891
- Total cash expense	<u>1,408,613</u>	<u>1,425,349</u>	<u>1,411,038</u>	<u>1,680,612</u>	<u>1,656,769</u>
= Net cash farm income	334,224	276,607	356,904	452,784	281,122
+ Inventory change*	116,185	127,331	43,211	145,910	-67,108
+ Depreciation + capital adjust*	<u>-164,823</u>	<u>-176,694</u>	<u>-178,679</u>	<u>-144,249</u>	<u>-129,249</u>
= Net farm income	285,586	227,244	221,436	454,445	84,765

*Changes calculated as ending value minus beginning value.

To put the profit values in perspective across farm sizes and years, we calculate profitability ratios. Rate of return on assets (ROA) is the farm operating profit (equal to net farm income plus interest expense less value of operator labor and management) divided by average total farm asset value (valued at current market value). Rate of return on assets is a measure of how much profit the farm business assets generated. The average 2015 dairy farm ROA (market) was 2.6 percent. The average 2015 ROE (market) was 2.2 percent, with ROE less than ROA an indicator, borrowed

money was return nothing relating to profitability. Operating profit margin is the operating profit divided by gross revenues. Operating profit margin measures the dollars of profit generated per dollar of revenue. In 2015, Michigan dairy farms generated 10.4 cents of profit per dollar of revenue. Asset turnover (ATO) is gross farm revenue divided by average asset value. Asset turnover measures the efficiency with which farm assets generate revenue. Average ATO value was 25.2 percent in 2015.

Table 3. Average Michigan Dairy Farm Profitability Indicators, 2011-2015

	2011	2012	2013	2014	2015
	(%)	(%)	(%)	(%)	(%)
Rate of return on assets*	11.2	9.3	7.8	10.3	2.6
Rate of return on equity	13.7	11.2	9.2	12.5	2.2
Operating profit margin	33.5	30.3	26.2	31.2	10.4
Asset turnover rate*	33.3	30.7	29.7	33.1	25.2

* Assets valued at market value.

Tables 4 and 5 display average income and expenses per hundredweight (cwt) of milk and per cow. Income and expenses were adjusted to an accrual basis. Average, accrual adjusted income and expenses per cropped acre were also included. Government payments include all farm government payments as it was not possible to separate crop from dairy payments.

Table 4 contains the average income and expense items across all 89 dairy farms in the 2015 summary while Table 5 displays the average income and expense items for farms that reported that item. For example, all farms had milk income so that income is identical in both tables. In contrast, only some farms reported DHIA expense so that item is larger when averaged only across those farms with that expense. *These tables should not be interpreted as an estimate of the true cost of producing milk.* Income related to the milking herd and cash crop sales are reported in Tables 4 and 5. Unpaid factors, including labor, management and capital, are not accounted for in the expense items. In addition, the allocation of resources amongst farm enterprises is not accurately reflected leaving the milking herd as the residual claimant on all expenses (especially labor costs).

The bottom section of Tables 4 and 5 presents crop related expenses divided by the total cropped acres. Again, these values should not be interpreted as cost of crop production. To accurately calculate a crop cost of production requires labor and management (among other) expenses that could not be separated out in these financial records.

Table 4. Average income and expenses across all farms*, 2015

Income Items:	Per cwt.	Per Cow
Milk	\$17.06	\$4,141.63
Cull Cows & Calves	\$1.84	\$420.74
Dairy Steers	\$1.10	\$275.26
Dairy Heifers	\$0.66	\$169.37
Government Payments	\$0.48	\$107.81
Patronage Dividends, cash	\$0.19	\$47.14
Crop Sales	\$1.94	\$428.15
Other Cash Income	\$1.02	\$231.09
Expense Items:	Per cwt.	Per Cow
Purchased Feeds	\$5.89	\$1,418.18
Breeding Fees	\$0.20	\$49.64
Veterinary	\$0.53	\$127.76
Livestock Supplies	\$0.90	\$212.54
DHIA	\$0.09	\$23.82
Milk & Livestock Mkt. & Trucking	\$1.02	\$240.12
Interest	\$0.72	\$168.13
Fuel & Oil	\$0.85	\$194.15
Repairs	\$1.33	\$313.70
Custom Hire	\$0.70	\$168.51
Hired Labor	\$2.94	\$714.45
Leases	\$0.44	\$102.85
Real Estate Taxes	\$0.31	\$67.63
Farm Insurance	\$0.43	\$99.14
Utilities	\$0.58	\$134.59
Dues, Professional Fees	\$0.15	\$34.93
Miscellaneous	\$0.63	\$159.93
Machinery Depreciation	\$1.13	\$261.61
Building Depreciation	\$0.60	\$143.11
Family Living	\$1.45	\$321.55
Expense Items per Cropped Acre:	Per Acre	
Seed	\$82.75	
Fertilizer	\$78.88	
Crop Chemicals	\$25.50	
Crop Insurance	\$17.36	
Crop Miscellaneous	\$37.15	
Land Rent	\$68.16	

* All income and expense items averaged across all 89 farms whether or not they had that income or expense item. Other cash income includes custom work, insurance claims, and miscellaneous income.

Table 5. Average income and expenses across farms with that item*, 2015

Income Items:	Per cwt.	Per Cow
Milk	\$17.06	\$4,141.63
Cull Cows & Calves	\$1.84	\$420.74
Dairy Steers	\$2.78	\$569.72
Dairy Heifers	\$1.40	\$358.90
Government Payments	\$0.57	\$127.93
Patronage Dividends, cash	\$0.21	\$52.44
Crop Sales	\$3.57	\$568.74
Other Cash Income	\$1.06	\$239.15
Expense Items:	Per cwt.	Per Cow
Purchased Feeds	\$5.89	\$1,418.18
Breeding Fees	\$0.23	\$58.13
Veterinary	\$0.53	\$127.76
Livestock Supplies	\$0.90	\$212.54
DHIA	\$0.26	\$68.39
Milk & Livestock Mkt. & Trucking	\$1.02	\$240.12
Interest	\$0.77	\$180.28
Fuel & Oil	\$0.85	\$194.15
Repairs	\$1.33	\$313.70
Custom Hire	\$0.83	\$199.97
Hired Labor	\$3.12	\$756.98
Leases	\$0.80	\$186.81
Real Estate Taxes	\$0.34	\$74.31
Farm Insurance	\$0.43	\$99.14
Utilities	\$0.58	\$134.59
Dues, Professional Fees	\$0.15	\$34.93
Miscellaneous	\$0.63	\$159.93
Machinery Depreciation	\$1.13	\$261.61
Building Depreciation	\$0.60	\$143.11
Family Living	\$1.45	\$321.55
Expense Items per Cropped Acre:	Per Acre	
Seed	\$87.67	
Fertilizer	\$84.58	
Crop Chemicals	\$30.26	
Crop Insurance	\$19.14	
Crop Miscellaneous	\$38.28	
Land Rent	\$69.73	

* Income and expense items averaged only across farms with that item.

Table 6 compares major production, income and expense items across all farms over a five year time frame. The average milk price dropped \$7 2015.

Table 6. Average of Major Production, Income and Expenses Items (across all farms)

	2011	2012	2013	2014	2015
Milk sold per cow (pounds)	22,340	23,148	23,992	23,007	24,394
Average price of milk sold (\$/cwt)	20.65	18.67	20.53	24.18	17.06
Purchased Feeds (\$/cwt)	6.01	6.14	6.71	7.33	5.89
Interest Paid (\$/cwt)	0.91	0.90	0.90	0.82	0.72
Hired Labor (\$/cwt)	2.78	2.63	2.72	2.97	2.94
Fuel and Oil (\$/cwt)	1.29	1.31	1.22	1.34	0.85
Total Depreciation (\$/cwt)	2.58	2.43	2.44	2.29	1.73

Results by Herd Size

To further facilitate financial comparisons and benchmarking, the financial summaries were divided into herd size categories. Beginning with the 2010 summary we have utilized four herd size categories: 40 to 99 cows (14 herds), 100 to 249 cows (38 herds), 250 to 449 cows (16 herds), and 450+ cows (21 herds). These size categories are meant facilitate benchmarking performance to similar sized farms.

Table 7 displays average characteristics by herd size category. As expected, average milk production per cow was correlated with herd size across most size categories. Milk price was similar across all herd sizes. The smallest herds operated 4.5 crop acres per cow, the medium herds about 4.2 crop acres per cow, the medium-large herds about 2.2 crop acres per cow, and the largest herds about 2.2 crop acres per cow.

Table 7. Average 2015 Michigan Dairy Farm Characteristics by Herd Size Category

	40-99 cows	100-249 cows	250-449 cows	450+ cows
Average number of cows	73	179	325	812
Milk sold per cow (pounds)	21,332	23,449	26,889	26,253
Average price of milk sold (\$/cwt)	16.83	16.98	16.55	17.75
Total acres owned	199	438	377	928
Total crop acres	325	744	728	1,815
Number of farms	14	38	16	21

Table 8 displays the average farm income statement by herd size. Net farm income represents the returns to unpaid factors (i.e., labor, management and equity capital). Farms in the small herd size category had essentially no income left for returns to unpaid management and labor while the larger herd sizes recorded small, positive net farm incomes for 2015.

Table 8. Average 2015 Michigan Dairy Farm Income Statement by Herd Size

	40-99 cows	100-249 cows	250-449 cows	450+ cows
	(\$)	(\$)	(\$)	(\$)
Gross cash farm income	366,305	949,074	1,764,249	4,907,200
- Total cash expense	<u>318,870</u>	<u>817,178</u>	<u>1,563,670</u>	<u>4,138,894</u>
= Net cash farm income	47,436	131,896	200,578	768,306
+ Inventory change *	-21,3398	-25,252	-26,357	-204,367
+ Depreciation and capital adjustments*	<u>-26,007</u>	<u>-74,079</u>	<u>-110,019</u>	<u>-312,561</u>
= Net farm income	31	32,564	64,202	251,378

*Changes calculated as ending value minus beginning value.

Table 9 compares profitability measures across herd size with assets valued at market value. Farms in the smallest herd size category reported negative profitability while the other herd sizes realized positive values in 2015.

Table 9. Average 2015 Michigan Dairy Farm Profitability Indicators by Herd Size

	40-99 cows	100-249 cows	250-449 cows	450+ cows
	(%)	(%)	(%)	(%)
Rate of return on assets*	-2.2	1.8	2.2	3.5
Rate of return on equity	-3.5	1.2	1.5	3.2
Operating profit margin	-13.1	7.6	8.9	12.9
Asset turnover rate	16.8	23.2	24.8	26.8

* Assets valued at market value.

A. Financial Summary Information, All 89 Herds

Table 10 Crop Production and Marketing Summary
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Dairy			
Number of farms	89	23	23
Average number of cows	338	289	401
Milk production per cow, lbs.,	24,394	22,584	25,416
Average milk price per cwt.,	\$17.06	\$16.03	\$18.04
Acreage Summary			
Total acres owned	505	252	774
Total crop acres	928	576	1,314
Crop acres owned	493	270	719
Crop acres cash rented	434	306	595
Crop acres share rented	1	0	-
Total pasture acres	3	1	11
Percent crop acres owned	53 %	47 %	55 %
Mach invest/crop acre cost	640	608	498
Mach invest/crop acre market	1,046	921	1,072
Average Price Received (Cash Sales Only)			
Corn per bushel	3.34	3.76	3.85
Soybeans per bushel	9.51	9.05	9.21
Wheat, Winter per bushel	4.54	5.07	3.52
Oats per bushel	1.80	-	1.72
Corn Silage per ton	44.98	39.98	73.78
Hay, Alfalfa per ton	54.82	-	-
Wheat, Spring per bushel	5.17	4.85	-
Straw per ton	109.59	119.63	-
Haylage, Mixed per ton	105.01	-	-
Hay, Mixed per ton	126.03	-	-
Average Yield Per Acre			
Haylage, Alfalfa (ton)	10.26	8.21	9.60
Corn Silage (ton)	17.68	19.35	16.39
Corn (bushel)	156.84	131.25	150.12
Soybeans (bushel)	47.53	-	42.65
Corn snaplage (ton)	7.55	6.91	-
Wheat, Winter (bushel)	67.15	-	66.99
Hay, Grass (ton)	7.35	24.87	-
Hay, Alfalfa (ton)	2.73	-	-

Table 11

Farm Income Statement
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Cash Farm Income			
Barley	230	-	-
Beans, Black Turtle	332	-	1,285
Cordwood	245	880	63
Corn	43,320	11,845	96,377
Corn Silage	1,426	1,163	2,222
Hay, Alfalfa	1,037	1,664	158
Hay, Mixed	216	217	273
Hay, Mixed Alfalfa/Grass	151	-	-
Haylage, Alfalfa	9,314	-	36,043
Haylage, Mixed	214	-	56
Oats	312	-	981
Soybeans	34,239	15,012	61,484
Speltz	54	-	209
Straw	478	1,131	587
Sugar Beets	3,933	-	12,587
Wheat, Soft Red Winter	443	-	1,714
Wheat, Spring	2,531	955	5,820
Wheat, Winter	6,878	5,988	6,655
Soybeans, Organic	109	-	424
User Added Crop	4,265	-	16,502
Miscellaneous crop income	10	-	37
Beef Cow-Calf, Beef Calves	2,914	-	7,814
Beef Finishing	149	259	-
Dairy, Milk	1,476,954	1,206,588	1,858,830
Dairy, Dairy Calves	36,965	33,258	37,644
Dairy Heifers (for sale)	4,549	2,970	3,987
Dairy Replacement Heifers	12,841	4,498	57
Dairy Finishing	16,186	2,282	19,970
Dairy Feeder	16,152	4,642	40,911
Dairy Backgrounding	188	-	727
User Added Livestock, User Added	351	1,357	-
Cull breeding livestock	135,938	99,418	189,158
Misc. livestock income	212	52	200
Crop government payments	17,615	10,368	24,015
CRP payments	414	317	526
Other government payments	8,937	4,939	12,683
Custom work income	12,745	9,670	31,400
Patronage dividends, cash	13,143	7,365	19,402
Crop insurance income	9,820	479	6,064
Property insurance income	13,044	8,679	23,638
Sale of resale items	9,529	-	36,871
Livestock insurance inc	152	587	-
Contract livestock income	101	-	-
Real estate tax refund	865	-	-
Other farm income	38,260	78,433	52,621
Gross Cash Farm Income	1,937,891	1,515,017	2,609,996

Table 11

Farm Income Statement (continued)
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Cash Farm Expense			
Seed	52,897	35,162	69,698
Fertilizer	53,187	42,036	78,320
Crop chemicals	24,001	7,494	33,486
Crop insurance	5,126	695	13,561
Drying expense	1,108	171	794
Storage	557	272	345
Crop packaging and supplies	775	-	-
Crop fuel & oil	516	-	-
Crop hauling and trucking	617	682	44
Crop marketing	1,444	132	3,855
Crop miscellaneous	11,244	2,016	33,174
Crop consultants	92	-	283
Feeder livestock purchase	31	-	120
Purchased feed	507,052	457,500	628,467
Breeding fees	14,528	10,866	18,776
Veterinary	45,641	44,063	50,311
BST	203	225	-
Livestock supplies	45,205	41,457	59,873
DHIA	2,131	1,863	1,844
Contract production exp.	26,835	1,641	23,727
Livestock insurance	119	-	-
Livestock fuel & oil	291	-	-
Livestock leases	801	-	3,098
Grazing fees	324	-	-
Livestock hauling and trucking	48,283	36,925	57,286
Livestock marketing	19,833	18,228	26,549
Bedding	18,801	13,947	22,559
Livestock miscellaneous	338	-	718
Livestock consultants	1,293	1,734	875
Interest	58,451	37,948	67,869
Packaging and supplies	3,547	869	176
Supplies	24,434	25,165	44,265
Fuel & oil	56,953	40,191	80,754
Repairs	77,182	59,924	122,282
Repair, machinery	15,955	755	24,822
Repair, livestock equip	656	-	-
Custom hire	53,532	64,938	86,108
Repair, buildings	8,167	6,807	10,393
Hired labor	263,484	188,733	336,415
Land rent	60,981	64,980	86,904
Machinery leases	16,926	31,761	11,692
Building leases	19,584	71,707	3,153
Real estate taxes	16,354	10,281	26,470
Personal property taxes	368	277	295
Farm insurance	28,783	24,386	36,265

Utilities	42,741	31,432	50,241
Hauling and trucking	1,937	2,228	4,578
Marketing	1,238	-	-
Dues & professional fees	10,050	7,415	15,980
Purchase of resale items	1,517	-	-
Miscellaneous	10,661	8,106	13,577
Total cash expense	1,656,769	1,395,011	2,150,003
Net cash farm income	281,122	120,006	459,994
Inventory Changes			
Prepays and supplies	-43,115	-70,188	-44,615
Accounts receivable	-32,349	-13,072	-49,192
Hedging accounts	497	-	-
Other current assets	3,237	-1,702	5,623
Crops and feed	6,768	-27,226	58,862
Market livestock	-3,517	104	-16,414
Breeding livestock	13,355	-4,385	44,921
Other assets	-3,436	-2,423	-8,914
Accounts payable	-7,705	-741	29,328
Accrued interest	-841	-200	153
Total inventory change	-67,108	-119,833	19,753
Net operating profit	214,014	173	479,746
Depreciation			
Machinery and equipment	-79,348	-41,620	-136,522
Titled vehicles	-710	-1,414	-408
Buildings and improvements	-49,192	-50,436	-65,770
Total depreciation	-129,249	-93,470	-202,700
Net farm income from operations	84,765	-93,297	277,046
Gain or loss on capital sales	-	-	-
Net farm income	84,765	-93,297	277,046

Table 12

Inventory Changes
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Net cash farm income	281,122	115,465	459,994
Crops and Feed			
Ending inventory	472,208	318,391	747,323
Beginning inventory	465,440	346,854	688,461
Inventory change	6,768	-28,463	58,862
Market Livestock			
Ending inventory	30,663	8,188	65,023
Beginning inventory	34,181	8,079	81,437
Inventory change	-3,517	108	-16,414
Accts Receivable			
Ending inventory	74,812	69,460	99,673
Beginning inventory	107,162	83,126	148,865
Inventory change	-32,349	-13,666	-49,192
Prepaid Expenses and Supplies			
Ending inventory	81,526	75,153	119,457
Beginning inventory	124,641	148,531	164,072
Inventory change	-43,115	-73,378	-44,615
Hedging Activities			
Ending inventory	219	-	-
Withdrawals	278	-	-
Beginning inventory	-	-	-
Deposits	-	-	-
Gain or loss	497	-	-
Other Current Assets			
Ending inventory	33,338	13,542	67,382
Beginning inventory	30,101	15,321	61,758
Inventory change	3,237	-1,779	5,623
Breeding Livestock			
Ending inventory	1,020,321	916,907	1,209,125
Capital sales	24,354	76,415	53
Beginning inventory	954,686	750,574	1,151,286
Capital purchases	76,634	247,333	12,970
Depreciation, capital adjust	13,355	-4,585	44,921
Other Capital Assets			
Ending inventory	117,650	59,073	147,321
Capital sales	17,716	26,449	12,739
Beginning inventory	105,987	62,960	127,574
Capital purchases	32,815	25,095	41,400
Depreciation, capital adjust	-3,436	-2,533	-8,914
Accounts Payable			
Beginning inventory	68,716	65,517	87,878
Ending inventory	76,421	66,292	58,550
Inventory change	-7,705	-775	29,328
Accrued Interest			
Beginning inventory	1,325	365	1,499
Ending inventory	2,166	575	1,345
Inventory change	-841	-209	153
Total inventory change	-67,108	-125,280	19,753
Net operating profit	214,014	-9,815	479,746

Table 13

Depreciation
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Net operating profit	214,014	-9,815	479,746
Machinery and Equipment			
Ending inventory	635,465	377,329	680,788
Capital sales	4,981	2,782	8,130
Beginning inventory	570,585	309,778	611,843
Capital purchases	149,208	112,322	213,596
Depreciation, capital adjust.	-79,348	-41,989	-136,522
Titled Vehicles			
Ending inventory	52,208	6,286	7,440
Capital sales	-	-	-
Beginning inventory	6,976	5,354	7,848
Capital purchases	596	2,410	-
Depreciation, capital adjust.	-710	-1,478	-408
Buildings and Improvements			
Ending inventory	765,063	779,190	760,555
Capital sales	158	63	319
Beginning inventory	707,255	508,851	631,633
Capital purchases	152,505	316,476	195,011
Depreciation, capital adjust.	-49,192	-46,074	-65,770
Total depreciation, capital adj.	-129,249	-89,542	-202,700
Net farm income from operations	84,765	-99,356	277,046
Gain or loss on capital sales	-	-	-
Net farm income	84,765	-99,356	277,046

Table 14

Profitability Measures
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Profitability (assets valued at cost)			
Net farm income from operations	80,092	-99,356	277,046
Rate of return on assets	1.4 %	-4.5 %	5.1 %
Rate of return on equity	-0.1 %	-11.2 %	5.9 %
Operating profit margin	4.0 %	-12.7 %	12.4 %
Asset turnover rate	35.7 %	35.0 %	41.0 %
Farm interest expense	59,127	39,882	67,716
Value of operator lbr and mgmt.	83,121	65,728	94,639
Return on farm assets	56,098	-125,203	250,124
Average farm assets	3,922,620	2,807,029	4,912,194
Return on farm equity	-3,029	-165,084	182,407
Average farm equity	2,395,991	1,476,393	3,103,069
Value of farm production	1,400,565	982,131	2,016,169
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Profitability (assets valued at market)			
Net farm income from operations	172,850	-153,046	633,483
Rate of return on assets	2.6 %	-5.0 %	7.8 %
Rate of return on equity	2.2 %	-9.7 %	9.0 %
Operating profit margin	10.4 %	-18.2 %	30.1 %
Asset turnover rate	25.2 %	27.4 %	25.8 %
Farm interest expense	59,292	39,882	67,716
Value of operator lbr and mgmt.	84,996	65,728	94,639
Return on farm assets	147,145	-178,893	606,560
Average farm assets	5,605,489	3,587,197	7,823,349
Return on farm equity	87,854	-218,774	538,844
Average farm equity	4,055,075	2,256,561	6,014,223
Value of farm production	1,413,606	982,131	2,016,169

Table 15

Liquidity & Repayment Capacity Measures
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Liquidity			
Current ratio	2.25	1.45	3.26
Working capital	440,626	152,454	888,774
Working capital to gross inc	22.9 %	10.6 %	33.6 %
Current assets	792,212	489,546	1,281,334
Current liabilities	351,586	337,093	392,560
Gross revenues (accrual)	1,922,206	1,432,416	2,644,756
Repayment capacity			
Net farm income from operations	84,765	-99,356	277,046
Depreciation	129,249	89,542	202,700
Personal income	19,995	21,100	27,697
Family living/owner withdrawals	-84,458	-54,246	-125,956
Cash discrepancy	0	0	0
Payments on personal debt	-2,615	-2,720	-4,484
Income taxes paid	-10,292	-1,041	-37,737
Interest on term debt	66,737	45,318	85,300
Capital debt repayment capacity	203,382	-1,403	424,566
Scheduled term debt payments	-176,267	-112,995	-216,981
Capital debt repayment margin	27,115	-114,398	207,584
Cash replacement allowance	-43,968	-32,651	-69,404
Replacement margin	-16,853	-147,050	138,180
Term debt coverage ratio	1.15	-0.01	1.96
Replacement coverage ratio	0.92	-0.01	1.48

Table 16

Balance Sheet at Cost Values
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
Number of farms	89		23		23	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	106,900	96,608	44,830	4,813	213,118	181,222
Prepaid expenses & supplies	124,882	81,305	148,531	75,153	164,072	119,457
Growing crops	28,455	28,682	13,111	12,974	45,447	45,574
Accounts receivable	107,050	74,397	83,126	69,460	148,865	99,673
Hedging accounts	0	222	0	0	0	0
Crops held for sale or feed	464,727	471,389	346,854	318,391	688,461	747,323
Crops under government loan	328	1,322	0	0	1,253	1,253
Market livestock held for sale	34,569	31,007	8,079	8,188	81,437	65,023
Other current assets	1,695	4,727	2,210	569	16,311	21,808
Total current farm assets	868,606	789,659	646,742	489,546	1,358,965	1,281,334
Intermediate Farm Assets						
Breeding livestock	943,241	1,009,624	750,574	916,907	1,151,286	1,209,125
Machinery and equipment	560,659	625,756	309,778	377,329	611,843	680,788
Titled vehicles	7,055	6,940	5,354	6,286	7,848	7,440
Other intermediate assets	78,671	87,853	40,132	37,635	93,056	104,017
Total intermediate farm assets	1,589,626	1,730,172	1,105,838	1,338,157	1,864,034	2,001,370
Long Term Farm Assets						
Farm land	657,763	712,799	343,795	357,674	850,105	998,571
Buildings and improvements	672,115	773,757	508,851	779,190	631,633	760,555
Other long-term assets	24,209	27,056	22,828	21,438	34,518	43,304
Total long-term farm assets	1,354,087	1,513,613	875,474	1,158,301	1,516,256	1,802,429
Total Farm Assets	3,812,319	4,033,445	2,628,054	2,986,004	4,739,255	5,085,134
Total Nonfarm Assets	210,337	219,924	118,618	121,124	317,500	345,835
Total Assets	4,022,656	4,253,368	2,746,672	3,107,129	5,056,754	5,430,969
Liabilities						
Current Farm Liabilities						
Accrued interest	1,339	2,190	365	575	1,499	1,345
Accounts payable	69,142	77,244	65,517	66,292	87,878	58,550
Current notes	88,716	136,572	104,175	166,473	116,820	178,089
Government crop loans	213	736	0	0	815	815
Principal due on term debt	108,755	134,494	67,677	103,753	131,681	153,761
Total current farm liabilities	268,164	351,236	237,734	337,093	338,692	392,560
Total intermediate farm liabs	333,605	408,782	333,001	663,995	423,443	378,480
Total long term farm liabilities	811,706	880,287	519,506	569,943	922,332	1,162,745
Total farm liabilities	1,413,475	1,640,305	1,090,241	1,571,030	1,684,467	1,933,785
Total nonfarm liabilities	31,047	29,648	33,086	31,308	50,921	50,036
Total liabilities	1,444,522	1,669,953	1,123,327	1,602,339	1,735,388	1,983,821
Net worth (farm and nonfarm)	2,578,134	2,583,415	1,623,345	1,504,790	3,321,367	3,447,148
Net worth change		5,281		-118,555		125,782
Percent net worth change		0 %		-7 %		4 %
Ratio Analysis						
Current farm liabilities / assets	31 %	44 %	37 %	69 %	25 %	31 %
Intermediate farm liab. / assets	21 %	24 %	30 %	50 %	23 %	19 %
Long term farm liab. / assets	60 %	58 %	59 %	49 %	61 %	65 %
Total debt to asset ratio	36 %	39 %	41 %	52 %	34 %	37 %

Table 17

Balance Sheet at Market Values
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		Low 25%		High 25%	
	All Farms					
Number of farms	89		23		23	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	101,619	98,371	44,830	4,813	213,118	181,222
Prepaid expenses & supplies	124,641	81,526	148,531	75,153	164,072	119,457
Growing crops	28,425	28,664	13,111	12,974	45,447	45,574
Accounts receivable	107,162	74,812	83,126	69,460	148,865	99,673
Hedging accounts	0	219	0	0	0	0
Crops held for sale or feed	465,673	471,975	346,854	318,391	688,461	747,323
Crops under government loan	324	1,307	0	0	1,253	1,253
Market livestock held for sale	34,181	30,663	8,079	8,188	81,437	65,023
Other current assets	1,676	4,674	2,210	569	16,311	21,808
Total current farm assets	863,699	792,212	646,742	489,546	1,358,965	1,281,334
Intermediate Farm Assets						
Breeding livestock	958,437	1,023,942	750,715	917,048	1,151,417	1,208,342
Machinery and equipment	910,538	994,358	512,220	525,126	1,298,683	1,463,622
Titled vehicles	16,887	18,485	18,730	19,509	22,961	30,404
Other intermediate assets	86,781	95,848	40,132	37,635	98,623	110,437
Total intermediate farm assets	1,972,642	2,132,633	1,321,797	1,499,318	2,571,683	2,812,804
Long Term Farm Assets						
Farm land	1,624,158	1,728,877	740,653	754,369	2,357,234	2,653,557
Buildings and improvements	958,826	1,085,520	701,912	973,508	1,150,542	1,382,855
Other long-term assets	24,907	28,021	23,964	22,587	33,767	43,956
Total long-term farm assets	2,607,890	2,842,418	1,466,529	1,750,463	3,541,542	4,080,368
Total Farm Assets	5,444,232	5,767,264	3,435,067	3,739,327	7,472,191	8,174,506
Total Nonfarm Assets	279,495	285,158	177,802	181,672	452,923	467,216
Total Assets	5,723,727	6,052,421	3,612,869	3,920,999	7,925,114	8,641,722
Liabilities						
Current Farm Liabilities						
Accrued interest	1,325	2,166	365	575	1,499	1,345
Accounts payable	68,716	76,421	65,517	66,292	87,878	58,550
Current notes	88,566	135,923	104,175	166,473	116,820	178,089
Government crop loans	211	727	0	0	815	815
Principal due on term debt	109,530	136,348	67,677	103,753	131,681	153,761
Total current farm liabilities	268,347	351,586	237,734	337,093	338,692	392,560
Total intermediate farm liabs	336,105	408,791	333,001	663,995	423,443	378,480
Total long term farm liabilities	827,314	909,202	519,506	569,943	922,332	1,162,745
Total farm liabilities	1,431,766	1,669,578	1,090,241	1,571,030	1,684,467	1,933,785
Total nonfarm liabilities	30,698	29,315	33,086	31,308	50,921	50,036
Total liabs excluding deferreds	1,462,464	1,698,893	1,123,327	1,602,339	1,735,388	1,983,821
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	1,462,464	1,698,893	1,123,327	1,602,339	1,735,388	1,983,821
Net worth (farm and nonfarm)	4,261,263	4,353,528	2,489,542	2,318,661	6,189,727	6,657,901
Net worth excluding deferreds	4,261,263	4,353,528	2,489,542	2,318,661	6,189,727	6,657,901
Net worth change		92,265		-170,881		468,175
Percent net worth change		2 %		-7 %		8 %
Ratio Analysis						
Current farm liabilities / assets	31 %	44 %	37 %	69 %	25 %	31 %
Intermediate farm liab. / assets	17 %	19 %	25 %	44 %	16 %	13 %
Long term farm liab. / assets	32 %	32 %	35 %	33 %	26 %	28 %
Total debt to asset ratio	26 %	28 %	31 %	41 %	22 %	23 %
Debt to assets excl deferreds	26 %	28 %	31 %	41 %	22 %	23 %

Table 18

Statement Of Cash Flows
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Beginning cash (farm & nonfarm)	102,112	44,830	213,370
Cash Provided By Operating Activities			
Gross cash farm income	1,937,891	1,483,197	2,609,996
Total cash farm expense	-1,656,769	-1,367,731	-2,150,003
Net cash from hedging transactions	278	-	-
Cash provided by operating	281,399	115,465	459,994
Cash Provided By Investing Activities			
Sale of breeding livestock	24,354	76,415	53
Sale of machinery & equipment	4,981	2,782	8,130
Sale of titled vehicles	-	-	-
Sale of farm land	5,731	13,636	5,835
Sale of farm buildings	158	63	319
Sale of other farm assets	17,716	26,449	12,739
Sale of nonfarm assets	811	23	-
Purchase of breeding livestock	-76,634	-247,333	-12,970
Purchase of machinery & equip.	-149,208	-112,322	-213,596
Purchase of titled vehicles	-596	-2,410	-
Purchase of farm land	-66,947	-27,515	-154,301
Purchase of farm buildings	-152,505	-316,476	-195,011
Purchase of other farm assets	-32,815	-25,095	-41,400
Purchase of nonfarm assets	-3,819	-320	-4,210
Cash provided by investing	-428,772	-612,102	-594,413
Cash Provided By Financing Activities			
Money borrowed	507,891	768,649	586,009
Principal payments	-280,668	-290,617	-308,095
Personal income	19,995	21,100	27,697
Family living/owner withdrawals	-84,458	-54,246	-125,956
Income and social security tax	-10,292	-1,041	-37,737
Capital contributions	6,347	10,320	12,525
Capital distributions	-15,136	-1,091	-51,906
Dividends paid	-	-	-
Cash gifts and inheritances	2,680	9,894	-
Gifts given	-2,006	-6,350	-13
Other cash flows	-	-	-
Cash provided by financing	144,353	456,619	102,523
Net change in cash balance	-3,020	-40,018	-31,896
Ending cash (farm & nonfarm)	99,092	4,813	181,474
Discrepancy	0	0	0

Table 19

Financial Standards Measures
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Liquidity			
Current ratio	2.25	1.45	3.26
Working capital	440,626	152,454	888,774
Working capital to gross inc	22.9 %	10.6 %	33.6 %
Solvency (market)			
Farm debt to asset ratio	29 %	42 %	24 %
Farm equity to asset ratio	71 %	58 %	76 %
Farm debt to equity ratio	0.41	0.72	0.31
Profitability (cost)			
Rate of return on farm assets	1.4 %	-4.5 %	5.1 %
Rate of return on farm equity	-0.1 %	-11.2 %	5.9 %
Operating profit margin	4.0 %	-12.7 %	12.4 %
Net farm income	85,728	-99,356	277,046
EBITDA	276,411	30,067	547,463
Repayment Capacity			
Capital debt repayment capacity	203,382	-1,403	424,566
Capital debt repayment margin	27,115	-114,398	207,584
Replacement margin	-16,853	-147,050	138,180
Term debt coverage ratio	1.15	-0.01	1.96
Replacement coverage ratio	0.92	-0.01	1.48
Efficiency			
Asset turnover rate (cost)	35.7 %	35.0 %	41.0 %
Operating expense ratio	85.8 %	97.9 %	79.3 %
Depreciation expense ratio	6.7 %	6.3 %	7.7 %
Interest expense ratio	3.1 %	2.8 %	2.6 %
Net farm income ratio	4.4 %	-6.9 %	10.5 %

Table 20

Operator and Labor Information
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Operator Information			
Average number of operators	1.5	1.4	1.6
Average age of operators	51.8	50.6	53.4
Average number of years farming	24.2	23.9	25.5
Results Per Operator			
Working capital	288,351	111,799	552,481
Total assets (market)	3,960,776	2,875,400	5,371,881
Total liabilities	1,111,776	1,175,048	1,233,186
Net worth (market)	2,849,000	1,700,351	4,138,695
Net worth excl deferred liabs	2,849,000	1,700,351	4,138,695
Gross farm income	1,257,914	1,050,439	1,644,038
Total farm expense	1,202,443	1,123,300	1,471,820
Net farm income from operations	55,471	-72,861	172,218
Net nonfarm income	13,085	15,474	17,217
Family living & tax withdrawals	62,005	40,544	101,755
Total acres owned	330.5	193.2	481.1
Total crop acres	607.2	414.6	816.7
Crop acres owned	322.4	191.7	446.7
Crop acres cash rented	284.3	222.6	369.9
Crop acres share rented	0.5	0.3	-
Total pasture acres	2.1	0.5	6.8
Labor Analysis			
Number of farms	89	23	23
Total unpaid labor hours	4,674	4,324	4,752
Total hired labor hours	16,557	10,769	20,956
Total labor hours per farm	21,230	15,093	25,709
Unpaid hours per operator	3,059	3,171	2,954
Value of farm production / hour	66.58	65.07	78.42
Net farm income / unpaid hour	18.14	-22.98	58.30
Average hourly hired labor wage	16.11	17.39	16.33
Partnerships & LLCs			
Number of farms	42	8	11
Number of operators	2.0	1.9	2.1
Owner withdrawals per farm	86,275	157,957	-
Withdrawals per operator	40,867	63,183	-

Table 21

Financial Summary
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		
	All Farms	Low 25%	High 25%
Number of farms	89	23	23
Income Statement			
Gross cash farm income	1,937,891	1,483,197	2,609,996
Total cash farm expense	1,656,769	1,367,731	2,150,003
Net cash farm income	281,122	115,465	459,994
Inventory change	-67,108	-125,280	19,753
Depreciation	-129,249	-89,542	-202,700
Net farm income from operations	84,765	-99,356	277,046
Gain or loss on capital sales	-	-	-
Average net farm income	84,765	-99,356	277,046
Median net farm income	41,195	-55,204	140,179
Profitability (cost)			
Rate of return on assets	1.4 %	-4.5 %	5.1 %
Rate of return on equity	-0.1 %	-11.2 %	5.9 %
Operating profit margin	3.9 %	-12.7 %	12.4 %
Asset turnover rate	36.4 %	35.0 %	41.0 %
Profitability (market)			
Rate of return on assets	2.6 %	-5.0 %	7.8 %
Rate of return on equity	2.2 %	-9.7 %	9.0 %
Operating profit margin	10.4 %	-18.2 %	30.1 %
Asset turnover rate	25.2 %	27.4 %	25.8 %
Liquidity & Repayment (end of year)			
Current assets	792,212	489,546	1,281,334
Current liabilities	351,586	337,093	392,560
Current ratio	2.25	1.45	3.26
Working capital	440,626	152,454	888,774
Working capital to gross inc	22.9 %	10.6 %	33.6 %
Term debt coverage ratio	1.15	-0.01	1.96
Replacement coverage ratio	0.92	-0.01	1.48
Term debt to EBITDA	4.40	28.35	2.46
Solvency (end of year at cost)			
Number of farms	89	23	23
Total assets	4,253,368	3,107,129	5,430,969
Total liabilities	1,669,953	1,602,339	1,983,821
Net worth	2,583,415	1,504,790	3,447,148
Net worth change	5,281	-118,555	125,782
Farm debt to asset ratio	41 %	53 %	38 %
Total debt to asset ratio	39 %	52 %	37 %
Change in earned net worth %	0 %	-7 %	4 %
Solvency (end of year at market)			
Number of farms	89	22	23
Total assets	6,052,421	3,920,999	8,641,722
Total liabilities	1,698,893	1,602,339	1,983,821
Net worth	4,353,528	2,318,661	6,657,901
Total net worth change	92,265	-170,881	468,175
Farm debt to asset ratio	29 %	42 %	24 %
Total debt to asset ratio	28 %	41 %	23 %
Change in total net worth %	2 %	-7 %	8 %
Nonfarm Information			
Net nonfarm income	19,995	21,100	27,697
Farms reporting living expenses	2	-	-
Total family living expense	68,282	-	-
Total living, invest, cap. purch	33,955	-	-
Crop Acres			
Total crop acres	928	565	1,314
Total crop acres owned	493	261	719
Total crop acres cash rented	434	304	595
Total crop acres share rented	1	0	-
Machinery value per crop acre	1,046	951	1,072

Table 22

Summary Farm Income Statement
2015 MI Dairy Herds (All Herds)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Crop sales	109,867	38,856	243,478
Crop inventory change	6,768	-27,226	58,862
Gross crop income	116,635	11,630	302,340
Livestock sales	1,567,247	1,255,854	1,969,939
Livestock inventory change	-3,517	104	-16,414
Gross livestock income	1,563,730	1,255,958	1,953,525
Government payments	26,972	15,644	37,225
Other cash farm income	233,804	204,663	359,355
Change in accounts receivable	-32,349	-13,072	-49,192
Gain or loss on hedging accounts	497	-	-
Change in other assets	-438	-3,993	-3,417
Gain or loss on breeding lvst	13,355	-4,385	44,921
Gross farm income	1,922,206	1,466,444	2,644,756
Cash operating expenses	1,598,319	1,357,063	2,082,133
Change in prepaids and supplies	43,115	70,188	44,615
Change in growing crops	-238	132	-126
Change in accounts payable	7,705	741	-29,328
Depreciation	129,249	93,470	202,700
Total operating expense	1,778,150	1,521,593	2,299,994
Interest paid	58,451	37,948	67,869
Change in accrued interest	841	200	-153
Total interest expense	59,292	38,148	67,716
Total expenses	1,837,441	1,559,741	2,367,710
Net farm income from operations	84,765	-93,297	277,046
Gain or loss on capital sales	-	-	-
Net farm income	84,765	-93,297	277,046

B. Financial Summary Information, Herds with 40-99 Cows

Table 23 Crop Production and Marketing Summary			
2015 MI Dairy Herds (40-99 Cows)			
(Farms Sorted By Rate of Return on Assets - Mkt)			
	Avg. Of All Farms	Low 50%	High 50%
Dairy			
Number of farms	14	7	7
Average number of cows	73	72	73
Milk production per cow lbs.,	21,323	19,415	23,231
Average milk price per cwt.,	\$16.83	\$17.28	\$16.37
Acreage Summary			
Total acres owned	199	168	231
Total crop acres	325	355	294
Crop acres owned	180	142	219
Crop acres cash rented	144	213	74
Crop acres share rented	1	-	2
Total pasture acres	1	-	1
Percent crop acres owned	55 %	40 %	74 %
Mach invest/crop acre cost	546	424	694
Mach invest/crop acre market	943	674	1,267
Average Price Received (Cash Sales Only)			
Corn per bushel	3.53	-	-
Soybeans per bushel	10.06	-	9.95
Average Yield Per Acre			
Corn Silage (ton)	23.22	-	-
Haylage, Alfalfa (ton)	8.10	-	-

Table 24

Farm Income Statement
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Cash Farm Income			
Corn	10,976	10,083	11,869
Corn Silage	546	857	236
Hay, Alfalfa	2,747	4,938	557
Soybeans	17,056	5,980	28,132
Straw	190	380	-
Sugar Beets	4,323	-	8,646
Wheat, Spring	1,569	3,137	-
Wheat, Winter	1,363	-	2,727
Beef Cow-Calf, Beef Calves	2,198	-	4,396
Beef Finishing	425	851	-
Dairy, Milk	262,804	246,404	279,204
Dairy, Dairy Calves	6,995	6,803	7,187
Dairy Heifers (for sale)	694	-	1,388
Dairy Replacement Heifers	93	-	186
Dairy Feeder	2,187	4,373	-
Cull breeding livestock	29,483	28,873	30,093
Misc. livestock income	864	-	1,728
Crop government payments	6,051	7,488	4,615
Other government payments	2,015	1,126	2,904
Custom work income	1,070	73	2,067
Patronage dividends, cash	2,402	807	3,998
Crop insurance income	854	-	1,708
Property insurance income	3,145	6,289	-
Contract livestock income	643	-	1,286
Other farm income	5,610	3,776	7,445
Gross Cash Farm Income	366,305	332,238	400,373

Table 24

Farm Income Statement (continued)

2015 MI Dairy Herds (40-99 Cows)

(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Cash Farm Expense			
Seed	11,758	6,887	16,628
Fertilizer	18,831	18,024	19,638
Crop chemicals	4,703	2,999	6,408
Crop insurance	614	939	288
Drying expense	370	345	395
Crop hauling and trucking	679	1,358	-
Crop marketing	696	416	976
Crop miscellaneous	1,592	1,979	1,206
Purchased feed	93,030	80,248	105,812
Breeding fees	2,116	2,267	1,964
Veterinary	7,777	4,448	11,107
BST	919	-	1,837
Livestock supplies	9,469	12,060	6,878
DHIA	616	251	982
Livestock custom hire	164	-	327
Livestock hauling and trucking	12,585	13,132	12,039
Livestock marketing	4,961	5,454	4,469
Bedding	3,229	1,766	4,692
Consultants	344	-	689
Interest	10,678	3,650	17,705
Packaging and supplies	813	-	1,626
Supplies	2,006	1,157	2,856
Fuel & oil	14,390	14,007	14,773
Repairs	26,090	25,210	26,970
Custom hire	6,374	8,495	4,254
Repair, buildings	566	-	1,132
Hired labor	32,694	32,548	32,839
Land rent	11,668	11,826	11,510
Machinery leases	5,810	9,288	2,332
Real estate taxes	5,503	4,458	6,548
Farm insurance	7,809	7,859	7,759
Utilities	10,295	9,010	11,579
Dues & professional fees	2,797	2,932	2,662
Miscellaneous	6,923	4,647	9,200
Total cash expense	318,870	287,658	350,081
Net cash farm income	47,436	44,579	50,292
Inventory Changes			
Prepays and supplies	-13,082	-12,833	-13,330
Accounts receivable	-7,374	-10,443	-4,306
Hedging accounts	-	-	-
Other current assets	-3,532	-7,447	383
Crops and feed	1,018	-6,685	8,722
Market livestock	-2,232	211	-4,674
Breeding livestock	7,668	4,764	10,573
Other assets	-1,599	-547	-2,651

Accounts payable	-2,266	-1,565	-2,967
Accrued interest	0	-45	45
Total inventory change	-21,398	-34,590	-8,206
Net operating profit	26,038	9,990	42,086
Depreciation			
Machinery and equipment	-17,947	-13,422	-22,473
Titled vehicles	-1,787	-2,716	-857
Buildings and improvements	-6,272	-4,426	-8,119
Total depreciation	-26,007	-20,565	-31,448
Net farm income from operations	31	-10,575	10,638
Gain or loss on capital sales	-	-	-
Net farm income	31	-10,575	10,638

Table 25

Inventory Changes
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Net cash farm income	47,436	44,579	50,292
Crops and Feed			
Ending inventory	127,987	117,912	138,062
Beginning inventory	126,968	124,597	129,339
Inventory change	1,018	-6,685	8,722
Market Livestock			
Ending inventory	8,385	7,744	9,026
Beginning inventory	10,616	7,533	13,700
Inventory change	-2,232	211	-4,674
Accts Receivable			
Ending inventory	11,264	9,830	12,697
Beginning inventory	18,638	20,273	17,003
Inventory change	-7,374	-10,443	-4,306
Prepaid Expenses and Supplies			
Ending inventory	14,078	10,725	17,431
Beginning inventory	27,160	23,558	30,761
Inventory change	-13,082	-12,833	-13,330
Hedging Activities			
Ending inventory	-	-	-
Withdrawals	-	-	-
Beginning inventory	-	-	-
Deposits	-	-	-
Gain or loss	-	-	-
Other Current Assets			
Ending inventory	6,889	5,385	8,394
Beginning inventory	10,422	12,832	8,011
Inventory change	-3,532	-7,447	383
Breeding Livestock			
Ending inventory	189,036	187,871	190,200
Capital sales	4,242	-	8,483
Beginning inventory	181,971	182,871	181,071
Capital purchases	3,638	236	7,039
Depreciation, capital adjust	7,668	4,764	10,573
Other Capital Assets			
Ending inventory	23,152	4,300	42,003
Capital sales	210	98	323
Beginning inventory	23,923	4,477	43,368
Capital purchases	1,038	468	1,609
Depreciation, capital adjust	-1,599	-547	-2,651
Accounts Payable			
Beginning inventory	3,322	1,841	4,803
Ending inventory	5,588	3,406	7,770
Inventory change	-2,266	-1,565	-2,967
Accrued Interest			
Beginning inventory	341	134	548
Ending inventory	341	179	504
Inventory change	0	-45	45
Total inventory change	-21,398	-34,590	-8,206
Net operating profit	26,038	9,990	42,086

Table 26

Depreciation
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Net operating profit	26,038	9,990	42,086
Machinery and Equipment			
Ending inventory	176,120	147,072	205,169
Capital sales	4,157	3,071	5,243
Beginning inventory	172,589	145,338	199,840
Capital purchases	25,636	18,228	33,044
Depreciation, capital adjust.	-17,947	-13,422	-22,473
Titled Vehicles			
Ending inventory	4,126	7,038	1,214
Capital sales	-	-	-
Beginning inventory	2,126	2,181	2,071
Capital purchases	3,787	7,574	-
Depreciation, capital adjust.	-1,787	-2,716	-857
Buildings and Improvements			
Ending inventory	113,741	69,110	158,372
Capital sales	-	-	-
Beginning inventory	96,504	59,173	133,835
Capital purchases	23,509	14,363	32,656
Depreciation, capital adjust.	-6,272	-4,426	-8,119
Total depreciation, capital adj.	-26,007	-20,565	-31,448
Net farm income from operations	31	-10,575	10,638
Gain or loss on capital sales	-	-	-
Net farm income	31	-10,575	10,638

Table 27

Profitability Measures
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Profitability (assets valued at cost)			
Net farm income from operations	31	-10,575	10,638
Rate of return on assets	-5.1 %	-9.2 %	-2.5 %
Rate of return on equity	-9.6 %	-12.3 %	-7.3 %
Operating profit margin	-16.1 %	-25.8 %	-8.7 %
Asset turnover rate	31.5 %	35.9 %	28.8 %
Farm interest expense	10,678	3,695	17,661
Value of operator lbr and mgmt.	53,826	53,008	54,644
Return on farm assets	-43,117	-59,889	-26,346
Average farm assets	849,095	647,670	1,050,520
Return on farm equity	-53,795	-63,584	-44,007
Average farm equity	562,242	518,203	606,282
Value of farm production	267,350	232,447	302,252
	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Profitability (assets valued at market)			
Net farm income from operations	8,050	-8,371	24,471
Rate of return on assets	-2.2 %	-5.5 %	-0.6 %
Rate of return on equity	-3.5 %	-6.7 %	-1.8 %
Operating profit margin	-13.1 %	-24.8 %	-4.1 %
Asset turnover rate	16.8 %	22.3 %	14.2 %
Farm interest expense	10,678	3,695	17,661
Value of operator lbr and mgmt.	53,826	53,008	54,644
Return on farm assets	-35,098	-57,684	-12,513
Average farm assets	1,588,934	1,043,934	2,133,935
Return on farm equity	-45,776	-61,379	-30,174
Average farm equity	1,302,081	914,466	1,689,696
Value of farm production	267,350	232,447	302,252

Table 28

Liquidity & Repayment Capacity Measures
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Liquidity			
Current ratio	3.55	6.29	2.48
Working capital	134,003	156,027	111,980
Working capital to gross inc	37.2 %	49.9 %	27.4 %
Current assets	186,498	185,507	187,488
Current liabilities	52,495	29,481	75,508
Gross revenues (accrual)	360,380	312,695	408,065
Repayment capacity			
Net farm income from operations	31	-10,575	10,638
Depreciation	26,007	20,565	31,448
Personal income	38,712	46,451	30,974
Family living/owner withdrawals	-36,992	-41,947	-32,037
Cash discrepancy	0	-	0
Payments on personal debt	-2,589	-3,796	-1,382
Income taxes paid	-1,688	-2,942	-435
Interest on term debt	13,264	3,870	22,658
Capital debt repayment capacity	36,745	11,625	61,864
Scheduled term debt payments	-39,456	-19,387	-59,524
Capital debt repayment margin	-2,711	-7,762	2,340
Cash replacement allowance	-20,033	-18,242	-21,824
Replacement margin	-22,744	-26,004	-19,484
Term debt coverage ratio	0.93	0.60	1.04
Replacement coverage ratio	0.62	0.31	0.76

Table 29

Balance Sheet at Cost Values
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 50%		High 50%	
Number of farms	14		7		7	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	24,090	17,895	33,710	33,911	14,470	1,879
Prepaid expenses & supplies	27,160	14,078	23,558	10,725	30,761	17,431
Growing crops	6,934	6,809	5,956	5,353	7,911	8,266
Accounts receivable	18,638	11,264	20,273	9,830	17,003	12,697
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	126,968	127,987	124,597	117,912	129,339	138,062
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	10,616	8,385	7,533	7,744	13,700	9,026
Other current assets	3,488	80	6,875	32	100	129
Total current farm assets	217,894	186,498	222,503	185,507	213,284	187,488
Intermediate Farm Assets						
Breeding livestock	181,971	189,036	182,871	187,871	181,071	190,200
Machinery and equipment	172,589	176,120	145,338	147,072	199,840	205,169
Titled vehicles	2,126	4,126	2,181	7,038	2,071	1,214
Other intermediate assets	20,889	20,117	3,818	3,641	37,959	36,594
Total intermediate farm assets	377,575	389,400	334,208	345,623	420,942	433,176
Long Term Farm Assets						
Farm land	155,256	155,256	38,949	38,949	271,562	271,562
Buildings and improvements	96,504	113,741	59,173	69,110	133,835	158,372
Other long-term assets	3,034	3,034	659	659	5,409	5,409
Total long-term farm assets	254,794	272,031	98,781	108,718	410,806	435,343
Total Farm Assets	850,262	847,928	655,492	639,848	1,045,033	1,056,008
Total Nonfarm Assets	130,119	137,143	109,167	118,718	151,071	155,567
Total Assets	980,381	985,071	764,659	758,566	1,196,103	1,211,575
Liabilities						
Current Farm Liabilities						
Accrued interest	341	341	134	179	548	504
Accounts payable	3,322	5,588	1,841	3,406	4,803	7,770
Current notes	20,632	22,153	11,867	12,077	29,397	32,229
Government crop loans	0	0	0	0	0	0
Principal due on term debt	26,192	24,412	15,517	13,819	36,867	35,005
Total current farm liabilities	50,487	52,495	29,359	29,481	71,615	75,508
Total intermediate farm liabs	46,239	37,856	37,997	27,902	54,481	47,809
Total long term farm liabilities	189,856	196,774	63,763	70,433	315,950	323,114
Total farm liabilities	286,582	287,124	131,118	127,817	442,046	446,431
Total nonfarm liabilities	31,614	27,395	36,526	33,185	26,701	21,604
Total liabilities	318,196	314,518	167,645	161,001	468,747	468,035
Net worth (farm and nonfarm)	662,186	670,552	597,015	597,565	727,356	743,540
Net worth change		8,367		550		16,184
Percent net worth change		1 %		0 %		2 %
Ratio Analysis						
Current farm liabilities / assets	23 %	28 %	13 %	16 %	34 %	40 %
Intermediate farm liab. / assets	12 %	10 %	11 %	8 %	13 %	11 %
Long term farm liab. / assets	75 %	72 %	65 %	65 %	77 %	74 %
Total debt to asset ratio	32 %	32 %	22 %	21 %	39 %	39 %

Table 30

Balance Sheet at Market Values
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

Number of farms	Avg. Of All Farms		Low 50%		High 50%	
	14	7	7	7	7	7
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	24,090	17,895	33,710	33,911	14,470	1,879
Prepaid expenses & supplies	27,160	14,078	23,558	10,725	30,761	17,431
Growing crops	6,934	6,809	5,956	5,353	7,911	8,266
Accounts receivable	18,638	11,264	20,273	9,830	17,003	12,697
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	126,968	127,987	124,597	117,912	129,339	138,062
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	10,616	8,385	7,533	7,744	13,700	9,026
Other current assets	3,488	80	6,875	32	100	129
Total current farm assets	217,894	186,498	222,503	185,507	213,284	187,488
Intermediate Farm Assets						
Breeding livestock	205,600	213,339	183,314	188,314	227,886	238,364
Machinery and equipment	298,488	305,829	232,928	236,266	364,048	375,392
Titled vehicles	2,979	4,979	2,500	7,357	3,457	2,600
Other intermediate assets	20,889	20,118	3,818	3,641	37,959	36,594
Total intermediate farm assets	527,955	544,264	422,561	435,578	633,350	652,950
Long Term Farm Assets						
Farm land	646,934	651,168	292,808	292,808	1,001,060	1,009,529
Buildings and improvements	190,275	206,812	112,123	122,661	268,427	290,963
Other long-term assets	3,034	3,034	659	659	5,409	5,409
Total long-term farm assets	840,243	861,014	405,590	416,128	1,274,896	1,305,900
Total Farm Assets	1,586,092	1,591,776	1,050,653	1,037,214	2,121,530	2,146,339
Total Nonfarm Assets	168,894	176,816	136,353	145,903	201,436	207,728
Total Assets	1,754,986	1,768,592	1,187,006	1,183,117	2,322,966	2,354,067
Liabilities						
Current Farm Liabilities						
Accrued interest	341	341	134	179	548	504
Accounts payable	3,322	5,588	1,841	3,406	4,803	7,770
Current notes	20,632	22,153	11,867	12,077	29,397	32,229
Government crop loans	0	0	0	0	0	0
Principal due on term debt	26,192	24,412	15,517	13,819	36,867	35,005
Total current farm liabilities	50,487	52,495	29,359	29,481	71,615	75,508
Total intermediate farm liabs	46,239	37,856	37,997	27,902	54,481	47,809
Total long term farm liabilities	189,856	196,774	63,763	70,433	315,950	323,114
Total farm liabilities	286,582	287,124	131,118	127,817	442,046	446,431
Total nonfarm liabilities	31,614	27,395	36,526	33,185	26,701	21,604
Total liabs excluding deferreds	318,196	314,518	167,645	161,001	468,747	468,035
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	318,196	314,518	167,645	161,001	468,747	468,035
Retained earnings	662,186	670,552	597,015	597,565	727,356	743,540
Market valuation equity	774,605	783,522	422,347	424,551	1,126,863	1,142,492
Net worth (farm and nonfarm)	1,436,790	1,454,074	1,019,361	1,022,116	1,854,219	1,886,032
Net worth excluding deferreds	1,436,790	1,454,074	1,019,361	1,022,116	1,854,219	1,886,032
Net worth change		17,284		2,755		31,813
Percent net worth change		1 %		0 %		2 %
Ratio Analysis						
Current farm liabilities / assets	23 %	28 %	13 %	16 %	34 %	40 %
Intermediate farm liab. / assets	9 %	7 %	9 %	6 %	9 %	7 %
Long term farm liab. / assets	23 %	23 %	16 %	17 %	25 %	25 %
Total debt to asset ratio	18 %	18 %	14 %	14 %	20 %	20 %
Debt to assets excl deferreds	18 %	18 %	14 %	14 %	20 %	20 %

Table 31

Statement Of Cash Flows
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Beginning cash (farm & nonfarm)	26,815	33,710	19,919
Cash Provided By Operating Activities			
Gross cash farm income	366,305	332,238	400,373
Total cash farm expense	-318,870	-287,658	-350,081
Net cash from hedging transactions	-	-	-
Cash provided by operating	47,436	44,579	50,292
Cash Provided By Investing Activities			
Sale of breeding livestock	4,242	-	8,483
Sale of machinery & equipment	4,157	3,071	5,243
Sale of titled vehicles	-	-	-
Sale of farm land	-	-	-
Sale of farm buildings	-	-	-
Sale of other farm assets	210	98	323
Sale of nonfarm assets	471	-	942
Purchase of breeding livestock	-3,638	-236	-7,039
Purchase of machinery & equip.	-25,636	-18,228	-33,044
Purchase of titled vehicles	-3,787	-7,574	-
Purchase of farm land	-	-	-
Purchase of farm buildings	-23,509	-14,363	-32,656
Purchase of other farm assets	-1,038	-468	-1,609
Purchase of nonfarm assets	0	-	0
Cash provided by investing	-48,528	-37,699	-59,356
Cash Provided By Financing Activities			
Money borrowed	72,780	34,766	110,794
Principal payments	-77,020	-43,007	-111,032
Personal income	38,712	46,451	30,974
Family living/owner withdrawals	-36,992	-41,947	-32,037
Income and social security tax	-1,688	-2,942	-435
Capital contributions	2,250	-	4,500
Capital distributions	-2,722	-	-5,443
Dividends paid	-	-	-
Cash gifts and inheritances	23	-	46
Gifts given	-74	-	-149
Other cash flows	-	-	-
Cash provided by financing	-4,731	-6,679	-2,782
Net change in cash balance	-5,823	201	-11,847
Ending cash (farm & nonfarm)	20,992	33,911	8,072
Discrepancy	0	-	0

Table 32

Financial Standards Measures
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Liquidity			
Current ratio	3.55	6.29	2.48
Working capital	134,003	156,027	111,980
Working capital to gross inc	37.2 %	49.9 %	27.4 %
Solvency (market)			
Farm debt to asset ratio	18 %	12 %	21 %
Farm equity to asset ratio	82 %	88 %	79 %
Farm debt to equity ratio	0.22	0.14	0.26
Profitability (cost)			
Rate of return on farm assets	-5.1 %	-9.2 %	-2.5 %
Rate of return on farm equity	-9.6 %	-12.3 %	-7.3 %
Operating profit margin	-16.1 %	-25.8 %	-8.7 %
Net farm income	31	-10,575	10,638
EBITDA	36,716	13,685	59,747
Repayment Capacity			
Capital debt repayment capacity	36,745	11,625	61,864
Capital debt repayment margin	-2,711	-7,762	2,340
Replacement margin	-22,744	-26,004	-19,484
Term debt coverage ratio	0.93	0.60	1.04
Replacement coverage ratio	0.62	0.31	0.76
Efficiency			
Asset turnover rate (cost)	31.5 %	35.9 %	28.8 %
Operating expense ratio	89.8 %	95.6 %	85.4 %
Depreciation expense ratio	7.2 %	6.6 %	7.7 %
Interest expense ratio	3.0 %	1.2 %	4.3 %
Net farm income ratio	0.0 %	-3.4 %	2.6 %

Table 33

Operator and Labor Information
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Operator Information			
Average number of operators	1.1	1.3	1.0
Average age of operators	52.6	53.0	52.1
Average number of years farming	25.6	28.2	22.1
Results Per Operator			
Working capital	117,253	121,354	111,980
Total assets (market)	1,547,518	920,202	2,354,067
Total liabilities	275,203	125,223	468,035
Net worth (market)	1,272,315	794,979	1,886,032
Net worth excl deferred liabs	1,272,315	794,979	1,886,032
Gross farm income	315,332	243,207	408,065
Total farm expense	315,305	251,432	397,427
Net farm income from operations	27	-8,225	10,638
Net nonfarm income	33,873	36,128	30,974
Family living & tax withdrawals	33,845	34,914	32,472
Total acres owned	174.5	130.9	230.6
Total crop acres	284.2	276.3	294.2
Crop acres owned	157.7	110.3	218.6
Crop acres cash rented	125.7	166.0	73.8
Crop acres share rented	0.8	-	1.9
Total pasture acres	0.6	-	1.4
Labor Analysis			
Number of farms	14	7	7
Total unpaid labor hours	4,188	4,289	4,087
Total hired labor hours	2,053	1,450	2,656
Total labor hours per farm	6,241	5,738	6,743
Unpaid hours per operator	3,665	3,336	4,087
Value of farm production / hour	42.84	40.51	44.82
Net farm income / unpaid hour	0.01	-2.47	2.60
Average hourly hired labor wage	17.21	28.44	12.36

Table 34

Financial Summary
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		
	All Farms	Low 50%	High 50%
Number of farms	14	7	7
Income Statement			
Gross cash farm income	366,305	332,238	400,373
Total cash farm expense	318,870	287,658	350,081
Net cash farm income	47,436	44,579	50,292
Inventory change	-21,398	-34,590	-8,206
Depreciation	-26,007	-20,565	-31,448
Net farm income from operations	31	-10,575	10,638
Gain or loss on capital sales	-	-	-
Average net farm income	31	-10,575	10,638
Median net farm income	-8,535	-14,865	-6,240
Profitability (cost)			
Rate of return on assets	-5.1 %	-9.2 %	-2.5 %
Rate of return on equity	-9.6 %	-12.3 %	-7.3 %
Operating profit margin	-16.1 %	-25.8 %	-8.7 %
Asset turnover rate	31.5 %	35.9 %	28.8 %
Profitability (market)			
Rate of return on assets	-2.2 %	-5.5 %	-0.6 %
Rate of return on equity	-3.5 %	-6.7 %	-1.8 %
Operating profit margin	-13.1 %	-24.8 %	-4.1 %
Asset turnover rate	16.8 %	22.3 %	14.2 %
Liquidity & Repayment (end of year)			
Current assets	186,498	185,507	187,488
Current liabilities	52,495	29,481	75,508
Current ratio	3.55	6.29	2.48
Working capital	134,003	156,027	111,980
Working capital to gross inc	37.2 %	49.9 %	27.4 %
Term debt coverage ratio	0.93	0.60	1.04
Replacement coverage ratio	0.62	0.31	0.76
Term debt to EBITDA	6.43	7.44	6.20
Solvency (end of year at cost)			
Number of farms	14	7	7
Total assets	985,071	758,566	1,211,575
Total liabilities	314,518	161,001	468,035
Net worth	670,552	597,565	743,540
Net worth change	8,367	550	16,184
Farm debt to asset ratio	34 %	20 %	42 %
Total debt to asset ratio	32 %	21 %	39 %
Change in earned net worth %	1 %	0 %	2 %
Solvency (end of year at market)			
Number of farms	14	7	7
Total assets	1,768,592	1,183,117	2,354,067
Total liabilities	314,518	161,001	468,035
Net worth	1,454,074	1,022,116	1,886,032
Total net worth change	17,284	2,755	31,813
Farm debt to asset ratio	18 %	12 %	21 %
Total debt to asset ratio	18 %	14 %	20 %
Change in total net worth %	1 %	0 %	2 %
Nonfarm Information			
Net nonfarm income	38,712	46,451	30,974
Crop Acres			
Total crop acres	325	355	294
Total crop acres owned	180	142	219
Total crop acres cash rented	144	213	74
Total crop acres share rented	1	-	2
Machinery value per crop acre	943	674	1,267

Table 35

Summary Farm Income Statement
2015 MI Dairy Herds (40-99 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Crop sales	38,772	25,376	52,168
Crop inventory change	1,018	-6,685	8,722
Gross crop income	39,790	18,690	60,890
Livestock sales	275,395	258,430	292,361
Livestock inventory change	-2,232	211	-4,674
Gross livestock income	273,164	258,641	287,686
Government payments	8,066	8,614	7,519
Other cash farm income	44,072	39,818	48,325
Change in accounts receivable	-7,374	-10,443	-4,306
Gain or loss on hedging accounts	-	-	-
Change in other assets	-5,007	-7,390	-2,623
Gain or loss on breeding lvst	7,668	4,764	10,573
Gross farm income	360,380	312,695	408,065
Cash operating expenses	308,192	284,008	332,375
Change in prepaids and supplies	13,082	12,833	13,330
Change in growing crops	125	604	-354
Change in accounts payable	2,266	1,565	2,967
Depreciation	26,007	20,565	31,448
Total operating expense	349,671	319,575	379,766
Interest paid	10,678	3,650	17,705
Change in accrued interest	0	45	-45
Total interest expense	10,678	3,695	17,661
Total expenses	360,349	323,270	397,427
Net farm income from operations	31	-10,575	10,638
Gain or loss on capital sales	-	-	-
Net farm income	31	-10,575	10,638

C. Financial Summary Information, Herds with 100-249 Cows

Table 36	Crop Production and Marketing Summary 2015 MI Dairy Herds (100-249 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)		
	Avg. Of All Farms	Low 50%	High 50%
Dairy			
Number of farms	38	19	19
Average number of cows	179	182	176
Milk production per cow lbs.,	23,449	22,715	24,182
Average milk price per cwt.,	\$16.98	\$16.83	\$17.13
Acreage Summary			
Total acres owned	438	302	574
Total crop acres	744	565	922
Crop acres owned	384	261	507
Crop acres cash rented	360	304	416
Crop acres share rented	-	-	-
Total pasture acres	0	-	1
Percent crop acres owned	52 %	46 %	55 %
Mach invest/crop acre cost	485	553	444
Mach invest/crop acre market	948	1,000	915
Average Price Received (Cash Sales Only)			
Corn per bushel	3.81	3.77	3.82
Oats per bushel	1.81	-	-
Average Yield Per Acre			
Corn Silage (ton)	17.07	17.07	-

Table 37

Farm Income Statement
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Cash Farm Income			
Asparagus	301	602	-
Barley	540	1,080	-
Cordwood	545	1,066	24
Corn	20,007	14,693	25,321
Corn Silage	1,542	1,092	1,993
Hay, Alfalfa	1,119	1,912	326
Hay, Mixed	315	263	366
Hay, Mixed Alfalfa/Grass	353	-	706
Oats	329	224	434
Soybeans	11,356	14,094	8,618
Speltz	127	-	254
Straw	564	418	711
Wheat, Soft Red Winter	1,037	-	2,075
Wheat, Winter	1,054	1,260	847
Miscellaneous crop income	22	-	44
Beef Cow-Calf, Beef Calves	1,068	-	2,136
Dairy, Milk	721,570	702,148	740,991
Dairy, Dairy Calves	14,965	14,245	15,685
Dairy Heifers (for sale)	2,747	765	4,729
Dairy Replacement Heifers	1,238	1,108	1,369
Dairy Finishing	4,730	3,626	5,835
Dairy Feeder	13,600	7,106	20,093
User Added Livestock, User Added	821	1,643	-
Cull breeding livestock	82,626	72,469	92,783
Misc. livestock income	9	-	18
Crop government payments	12,502	9,942	15,062
CRP payments	492	383	600
Other government payments	3,339	3,531	3,146
Custom work income	10,728	12,058	9,399
Patronage dividends, cash	8,701	7,383	10,018
Crop insurance income	2,416	1,295	3,537
Property insurance income	15,129	8,322	21,937
Other farm income	13,181	8,478	17,883
Gross Cash Farm Income	949,074	891,207	1,006,941

Table 37

Farm Income Statement (continued)
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Cash Farm Expense			
Seed	26,465	24,127	28,802
Fertilizer	36,379	31,835	40,923
Crop chemicals	12,442	8,044	16,841
Crop insurance	1,258	614	1,902
Drying expense	307	80	533
Storage	706	881	530
Crop hauling and trucking	78	155	-
Crop marketing	232	7	458
Crop miscellaneous	333	373	294
Purchased feed	237,844	249,174	226,515
Breeding fees	8,723	9,387	8,059
Veterinary	22,987	25,467	20,508
BST	136	272	-
Livestock supplies	35,266	34,205	36,328
DHIA	1,740	2,325	1,155
Contract production exp.	1,205	1,987	424
Livestock fuel & oil	682	-	1,364
Livestock leases	1,875	-	3,750
Livestock hauling and trucking	26,028	23,305	28,751
Livestock marketing	13,088	15,687	10,489
Bedding	7,887	8,261	7,512
Livestock miscellaneous	357	-	713
Consultants	166	-	333
Interest	26,690	28,730	24,650
Packaging and supplies	107	-	213
Supplies	10,133	10,490	9,775
Fuel & oil	40,677	34,669	46,684
Repairs	48,922	39,319	58,526
Repair, machinery	1,221	1,006	1,437
Custom hire	30,446	35,496	25,397
Repair, buildings	3,604	1,657	5,552
Hired labor	110,923	125,938	95,907
Land rent	24,486	26,606	22,366
Machinery leases	10,254	12,892	7,615
Building leases	2,707	5,225	189
Real estate taxes	11,406	9,493	13,318
Personal property taxes	325	37	613
Farm insurance	20,556	19,020	22,091
Utilities	23,417	23,488	23,346
Hauling and trucking	1,766	2,698	834
Dues & professional fees	5,490	5,301	5,678
Miscellaneous	7,866	6,419	9,313
Total cash expense	817,178	824,667	809,689
Net cash farm income	131,896	66,540	197,252

Inventory Changes			
Prepays and supplies	-16,524	-17,015	-16,033
Accounts receivable	-3,199	-6,215	-182
Hedging accounts	-	-	-
Other current assets	-763	1,363	-2,890
Crops and feed	5,409	-5,441	16,258
Market livestock	-40	-266	186
Breeding livestock	-2,089	-13,680	9,501
Other assets	3,324	-1,117	7,764
Accounts payable	-11,182	-19,338	-3,026
Accrued interest	-188	-242	-134
Total inventory change	-25,252	-61,950	11,445
Net operating profit	106,643	4,590	208,697
Depreciation			
Machinery and equipment	-51,303	-44,601	-58,004
Titled vehicles	-565	-711	-420
Buildings and improvements	-22,211	-19,479	-24,943
Total depreciation	-74,079	-64,791	-83,367
Net farm income from operations	32,564	-60,202	125,330
Gain or loss on capital sales	-	-	-
Net farm income	32,564	-60,202	125,330

Table 38

Inventory Changes
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Net cash farm income	131,896	66,540	197,252
Crops and Feed			
Ending inventory	271,708	238,630	304,786
Beginning inventory	266,300	244,071	288,528
Inventory change	5,409	-5,441	16,258
Market Livestock			
Ending inventory	15,743	11,398	20,087
Beginning inventory	15,782	11,664	19,901
Inventory change	-40	-266	186
Accts Receivable			
Ending inventory	36,080	29,614	42,546
Beginning inventory	39,279	35,829	42,729
Inventory change	-3,199	-6,215	-182
Prepaid Expenses and Supplies			
Ending inventory	34,069	31,139	36,999
Beginning inventory	50,593	48,154	53,031
Inventory change	-16,524	-17,015	-16,033
Hedging Activities			
Ending inventory	-	-	-
Withdrawals	-	-	-
Beginning inventory	-	-	-
Deposits	-	-	-
Gain or loss	-	-	-
Other Current Assets			
Ending inventory	22,710	14,311	31,109
Beginning inventory	23,474	12,948	33,999
Inventory change	-763	1,363	-2,890
Breeding Livestock			
Ending inventory	538,467	549,838	527,096
Capital sales	3,319	6,639	-
Beginning inventory	527,315	539,170	515,459
Capital purchases	16,561	30,987	2,136
Depreciation, capital adjust	-2,089	-13,680	9,501
Other Capital Assets			
Ending inventory	58,941	45,026	72,856
Capital sales	6,494	2,552	10,436
Beginning inventory	51,079	45,060	57,098
Capital purchases	11,032	3,635	18,429
Depreciation, capital adjust	3,324	-1,117	7,764
Accounts Payable			
Beginning inventory	43,598	45,907	41,288
Ending inventory	54,780	65,245	44,314
Inventory change	-11,182	-19,338	-3,026
Accrued Interest			
Beginning inventory	670	376	964
Ending inventory	858	618	1,097
Inventory change	-188	-242	-134
Total inventory change	-25,252	-61,950	11,445
Net operating profit	106,643	4,590	208,697

Table 39

Depreciation
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Net operating profit	106,643	4,590	208,697
Machinery and Equipment			
Ending inventory	357,386	302,777	411,995
Capital sales	2,235	2,453	2,018
Beginning inventory	350,189	310,950	389,428
Capital purchases	60,735	38,881	82,589
Depreciation, capital adjust.	-51,303	-44,601	-58,004
Titled Vehicles			
Ending inventory	6,509	4,844	8,174
Capital sales	-	-	-
Beginning inventory	7,074	5,554	8,594
Capital purchases	-	-	-
Depreciation, capital adjust.	-565	-711	-420
Buildings and Improvements			
Ending inventory	249,410	304,220	194,599
Capital sales	36	73	-
Beginning inventory	231,715	276,960	186,470
Capital purchases	39,943	46,813	33,073
Depreciation, capital adjust.	-22,211	-19,479	-24,943
Total depreciation, capital adj.	-74,079	-64,791	-83,367
Net farm income from operations	32,564	-60,202	125,330
Gain or loss on capital sales	-	-	-
Net farm income	32,564	-60,202	125,330

Table 40

Profitability Measures
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Profitability (assets valued at cost)			
Net farm income from operations	32,564	-60,202	125,330
Rate of return on assets	-0.3 %	-5.0 %	4.1 %
Rate of return on equity	-2.8 %	-11.9 %	4.6 %
Operating profit margin	-0.7 %	-15.3 %	10.3 %
Asset turnover rate	36.3 %	32.8 %	39.5 %
Farm interest expense	26,878	28,972	24,784
Value of operator lbr and mgmt.	64,610	62,892	66,328
Return on farm assets	-5,168	-94,121	83,785
Average farm assets	1,968,092	1,878,399	2,057,784
Return on farm equity	-32,046	-123,093	59,001
Average farm equity	1,161,426	1,034,871	1,287,981
Value of farm production	714,155	615,962	812,348
	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Profitability (assets valued at market)			
Net farm income from operations	92,338	-59,142	243,819
Rate of return on assets	1.8 %	-3.5 %	5.7 %
Rate of return on equity	1.2 %	-6.8 %	6.5 %
Operating profit margin	7.6 %	-15.1 %	24.9 %
Asset turnover rate	23.2 %	23.4 %	23.1 %
Farm interest expense	26,878	28,972	24,784
Value of operator lbr and mgmt.	64,610	62,892	66,328
Return on farm assets	54,606	-93,062	202,274
Average farm assets	3,076,582	2,632,356	3,520,807
Return on farm equity	27,728	-122,034	177,491
Average farm equity	2,269,916	1,788,828	2,751,004
Value of farm production	714,155	615,962	812,348

Table 41

Liquidity & Repayment Capacity Measures
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Liquidity			
Current ratio	1.82	1.72	1.91
Working capital	178,639	133,806	223,472
Working capital to gross inc	18.8 %	15.5 %	21.5 %
Current assets	395,194	320,405	469,984
Current liabilities	216,556	186,600	246,512
Gross revenues (accrual)	951,999	865,136	1,038,862
Repayment capacity			
Net farm income from operations	32,564	-60,202	125,330
Depreciation	74,079	64,791	83,367
Personal income	12,867	12,363	13,371
Family living/owner withdrawals	-59,668	-57,358	-61,978
Cash discrepancy	0	0	0
Payments on personal debt	-1,073	-1,398	-747
Income taxes paid	-1,071	-649	-1,493
Interest on term debt	36,208	37,953	34,463
Capital debt repayment capacity	93,906	-4,500	192,313
Scheduled term debt payments	-103,205	-91,001	-115,409
Capital debt repayment margin	-9,299	-95,501	76,904
Cash replacement allowance	-35,531	-32,745	-38,316
Replacement margin	-44,829	-128,246	38,588
Term debt coverage ratio	0.91	-0.05	1.67
Replacement coverage ratio	0.68	-0.04	1.25

Table 42

Balance Sheet at Cost Values
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 50%		High 50%	
Number of farms	38		19		19	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	23,508	14,125	19,616	-4,687	27,400	32,938
Prepaid expenses & supplies	50,593	34,069	48,154	31,139	53,031	36,999
Growing crops	21,884	21,600	13,126	13,841	30,642	29,359
Accounts receivable	39,279	36,080	35,829	29,614	42,729	42,546
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	266,300	271,708	244,071	238,630	288,528	304,786
Crops under government loan	759	759	0	0	1,517	1,517
Market livestock held for sale	15,782	15,743	11,664	11,398	19,901	20,087
Other current assets	1,590	1,110	-177	470	3,357	1,751
Total current farm assets	419,694	395,194	372,282	320,405	467,106	469,984
Intermediate Farm Assets						
Breeding livestock	527,315	538,467	539,170	549,838	515,459	527,096
Machinery and equipment	350,189	357,386	310,950	302,777	389,428	411,995
Titled vehicles	7,074	6,509	5,554	4,844	8,594	8,174
Other intermediate assets	27,102	31,369	23,216	23,045	30,988	39,693
Total intermediate farm assets	911,679	933,731	878,890	880,504	944,469	986,959
Long Term Farm Assets						
Farm land	373,634	369,576	347,751	331,961	399,518	407,190
Buildings and improvements	231,715	249,410	276,960	304,220	186,470	194,599
Other long-term assets	23,977	27,572	21,844	21,981	26,111	33,163
Total long-term farm assets	629,326	646,558	646,555	658,163	612,098	634,952
Total Farm Assets	1,960,700	1,975,483	1,897,727	1,859,072	2,023,673	2,091,895
Total Nonfarm Assets	86,270	90,184	107,950	106,369	64,589	73,999
Total Assets	2,046,970	2,065,667	2,005,677	1,965,441	2,088,262	2,165,893
Liabilities						
Current Farm Liabilities						
Accrued interest	670	858	376	618	964	1,097
Accounts payable	43,598	54,780	45,907	65,245	41,288	44,314
Current notes	54,359	91,916	40,855	65,529	67,863	118,302
Government crop loans	493	493	0	0	986	986
Principal due on term debt	66,997	68,510	53,048	55,208	80,946	81,811
Total current farm liabilities	166,117	216,556	140,186	186,600	192,047	246,512
Total intermediate farm liabs	191,163	179,735	209,992	180,140	172,335	179,330
Total long term farm liabilities	422,233	437,527	460,933	509,206	383,534	365,849
Total farm liabilities	779,513	833,818	811,111	875,946	747,916	791,690
Total nonfarm liabilities	16,125	15,525	23,244	22,790	9,007	8,259
Total liabilities	795,639	849,343	834,355	898,735	756,922	799,950
Net worth (farm and nonfarm)	1,251,331	1,216,325	1,171,323	1,066,706	1,331,340	1,365,943
Net worth change		-35,007		-104,617		34,604
Percent net worth change		-3 %		-9 %		3 %
Ratio Analysis						
Current farm liabilities / assets	40 %	55 %	38 %	58 %	41 %	52 %
Intermediate farm liab. / assets	21 %	19 %	24 %	20 %	18 %	18 %
Long term farm liab. / assets	67 %	68 %	71 %	77 %	63 %	58 %
Total debt to asset ratio	39 %	41 %	42 %	46 %	36 %	37 %

Table 43

Balance Sheet at Market Values
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

Number of farms	Avg. Of All Farms 38		Low 50% 19		High 50% 19	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	23,508	14,125	19,616	-4,687	27,400	32,938
Prepaid expenses & supplies	50,593	34,069	48,154	31,139	53,031	36,999
Growing crops	21,884	21,600	13,126	13,841	30,642	29,359
Accounts receivable	39,279	36,080	35,829	29,614	42,729	42,546
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	266,300	271,708	244,071	238,630	288,528	304,786
Crops under government loan	759	759	0	0	1,517	1,517
Market livestock held for sale	15,782	15,743	11,664	11,398	19,901	20,087
Other current assets	1,590	1,110	-177	470	3,357	1,751
Total current farm assets	419,694	395,194	372,282	320,405	467,106	469,984
Intermediate Farm Assets						
Breeding livestock	527,394	538,467	539,170	549,838	515,617	527,096
Machinery and equipment	666,728	706,016	549,837	551,660	783,618	860,371
Titled vehicles	18,319	18,031	14,224	14,317	22,415	21,746
Other intermediate assets	37,761	41,702	23,216	23,045	52,305	60,359
Total intermediate farm assets	1,250,201	1,304,215	1,126,447	1,138,859	1,373,955	1,469,572
Long Term Farm Assets						
Farm land	929,821	953,050	689,322	682,332	1,170,320	1,223,768
Buildings and improvements	413,244	431,157	435,718	444,909	390,770	417,405
Other long-term assets	26,343	30,244	27,385	27,054	25,300	33,434
Total long-term farm assets	1,369,407	1,414,450	1,152,424	1,154,294	1,586,390	1,674,607
Total Farm Assets	3,039,303	3,113,860	2,651,154	2,613,559	3,427,451	3,614,162
Total Nonfarm Assets	172,741	167,385	176,013	175,376	169,468	159,394
Total Assets	3,212,043	3,281,245	2,827,167	2,788,934	3,596,919	3,773,557
Liabilities						
Current Farm Liabilities						
Accrued interest	670	858	376	618	964	1,097
Accounts payable	43,598	54,780	45,907	65,245	41,288	44,314
Current notes	54,359	91,916	40,855	65,529	67,863	118,302
Government crop loans	493	493	0	0	986	986
Principal due on term debt	66,997	68,510	53,048	55,208	80,946	81,811
Total current farm liabilities	166,117	216,556	140,186	186,600	192,047	246,512
Total intermediate farm liabs	191,163	179,735	209,992	180,140	172,335	179,330
Total long term farm liabilities	422,233	437,527	460,933	509,206	383,534	365,849
Total farm liabilities	779,513	833,818	811,111	875,946	747,916	791,690
Total nonfarm liabilities	16,125	15,525	23,244	22,790	9,007	8,259
Total liabs excluding deferreds	795,639	849,343	834,355	898,735	756,922	799,950
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	795,639	849,343	834,355	898,735	756,922	799,950
Retained earnings	1,251,331	1,216,325	1,171,323	1,066,706	1,331,340	1,365,943
Market valuation equity	1,165,073	1,215,578	821,490	823,493	1,508,657	1,607,663
Net worth (farm and nonfarm)	2,416,405	2,431,903	1,992,812	1,890,199	2,839,997	2,973,607
Net worth excluding deferreds	2,416,405	2,431,903	1,992,812	1,890,199	2,839,997	2,973,607
Net worth change		15,498		-102,613		133,610
Percent net worth change		1 %		-5 %		5 %
Ratio Analysis						
Current farm liabilities / assets	40 %	55 %	38 %	58 %	41 %	52 %
Intermediate farm liab. / assets	15 %	14 %	19 %	16 %	13 %	12 %
Long term farm liab. / assets	31 %	31 %	40 %	44 %	24 %	22 %
Total debt to asset ratio	25 %	26 %	30 %	32 %	21 %	21 %
Debt to assets excl deferreds	25 %	26 %	30 %	32 %	21 %	21 %

Table 44

Statement Of Cash Flows
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Beginning cash (farm & nonfarm)	23,508	19,616	27,400
Cash Provided By Operating Activities			
Gross cash farm income	949,074	891,207	1,006,941
Total cash farm expense	-817,178	-824,667	-809,689
Net cash from hedging transactions	-	-	-
Cash provided by operating	131,896	66,540	197,252
Cash Provided By Investing Activities			
Sale of breeding livestock	3,319	6,639	-
Sale of machinery & equipment	2,235	2,453	2,018
Sale of titled vehicles	-	-	-
Sale of farm land	7,895	15,789	-
Sale of farm buildings	36	73	-
Sale of other farm assets	6,494	2,552	10,436
Sale of nonfarm assets	1,673	26	3,320
Purchase of breeding livestock	-16,561	-30,987	-2,136
Purchase of machinery & equip.	-60,735	-38,881	-82,589
Purchase of titled vehicles	-	-	-
Purchase of farm land	-3,836	-	-7,672
Purchase of farm buildings	-39,943	-46,813	-33,073
Purchase of other farm assets	-11,032	-3,635	-18,429
Purchase of nonfarm assets	-1,749	-623	-2,876
Cash provided by investing	-112,204	-93,407	-131,001
Cash Provided By Financing Activities			
Money borrowed	254,094	258,366	249,822
Principal payments	-211,759	-213,564	-209,954
Personal income	12,867	12,363	13,371
Family living/owner withdrawals	-59,668	-57,358	-61,978
Income and social security tax	-1,071	-649	-1,493
Capital contributions	-	-	-
Capital distributions	-25,872	-1,263	-50,480
Dividends paid	-	-	-
Cash gifts and inheritances	6,077	12,154	-
Gifts given	-3,742	-7,484	-
Other cash flows	-	-	-
Cash provided by financing	-29,074	2,564	-60,713
Net change in cash balance	-9,383	-24,303	5,538
Ending cash (farm & nonfarm)	14,125	-4,687	32,938
Discrepancy	0	0	0

Table 45

Financial Standards Measures
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Liquidity			
Current ratio	1.82	1.72	1.91
Working capital	178,639	133,806	223,472
Working capital to gross inc	18.8 %	15.5 %	21.5 %
Solvency (market)			
Farm debt to asset ratio	27 %	34 %	22 %
Farm equity to asset ratio	73 %	66 %	78 %
Farm debt to equity ratio	0.37	0.50	0.28
Profitability (cost)			
Rate of return on farm assets	-0.3 %	-5.0 %	4.1 %
Rate of return on farm equity	-2.8 %	-11.9 %	4.6 %
Operating profit margin	-0.7 %	-15.3 %	10.3 %
Net farm income	32,564	-60,202	125,330
EBITDA	133,521	33,562	233,481
Repayment Capacity			
Capital debt repayment capacity	93,906	-4,500	192,313
Capital debt repayment margin	-9,299	-95,501	76,904
Replacement margin	-44,829	-128,246	38,588
Term debt coverage ratio	0.91	-0.05	1.67
Replacement coverage ratio	0.68	-0.04	1.25
Efficiency			
Asset turnover rate (cost)	36.3 %	32.8 %	39.5 %
Operating expense ratio	86.0 %	96.1 %	77.5 %
Depreciation expense ratio	7.8 %	7.5 %	8.0 %
Interest expense ratio	2.8 %	3.3 %	2.4 %
Net farm income ratio	3.4 %	-7.0 %	12.1 %

Table 46

Operator and Labor Information
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Operator Information			
Average number of operators	1.5	1.5	1.5
Average age of operators	51.9	49.0	54.8
Average number of years farming	24.8	22.2	27.4
Results Per Operator			
Working capital	117,039	87,666	146,413
Total assets (market)	2,149,782	1,827,233	2,472,330
Total liabilities	556,466	588,827	524,105
Net worth (market)	1,593,316	1,238,406	1,948,225
Net worth excl deferred liabs	1,593,316	1,238,406	1,948,225
Gross farm income	623,724	566,813	680,634
Total farm expense	602,389	606,256	598,521
Net farm income from operations	21,335	-39,443	82,112
Net nonfarm income	8,430	8,100	8,760
Family living & tax withdrawals	39,795	38,005	41,585
Total acres owned	286.8	197.6	375.9
Total crop acres	487.1	370.0	604.2
Crop acres owned	251.3	170.7	331.9
Crop acres cash rented	235.8	199.3	272.4
Crop acres share rented	-	-	-
Total pasture acres	0.2	-	0.3
Labor Analysis			
Number of farms	38	19	19
Total unpaid labor hours	4,358	4,426	4,289
Total hired labor hours	7,835	7,727	7,944
Total labor hours per farm	12,193	12,153	12,233
Unpaid hours per operator	2,855	2,900	2,810
Value of farm production / hour	58.57	50.68	66.41
Net farm income / unpaid hour	7.47	-13.60	29.22
Average hourly hired labor wage	14.97	17.21	12.75
Partnerships & LLCs			
Number of farms	16	8	8
Number of operators	2.1	2.1	2.0
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-

Table 47

Financial Summary

2015 MI Dairy Herds (100-249 Cows)

(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		
	All Farms	Low 50%	High 50%
Number of farms	38	19	19
Income Statement			
Gross cash farm income	949,074	891,207	1,006,941
Total cash farm expense	817,178	824,667	809,689
Net cash farm income	131,896	66,540	197,252
Inventory change	-25,252	-61,950	11,445
Depreciation	-74,079	-64,791	-83,367
Net farm income from operations	32,564	-60,202	125,330
Gain or loss on capital sales	-	-	-
Average net farm income	32,564	-60,202	125,330
Median net farm income	42,395	-49,592	114,214
Profitability (cost)			
Rate of return on assets	-0.3 %	-5.0 %	4.1 %
Rate of return on equity	-2.8 %	-11.9 %	4.6 %
Operating profit margin	-0.7 %	-15.3 %	10.3 %
Asset turnover rate	36.3 %	32.8 %	39.5 %
Profitability (market)			
Rate of return on assets	1.8 %	-3.5 %	5.7 %
Rate of return on equity	1.2 %	-6.8 %	6.5 %
Operating profit margin	7.6 %	-15.1 %	24.9 %
Asset turnover rate	23.2 %	23.4 %	23.1 %
Liquidity & Repayment (end of year)			
Current assets	395,194	320,405	469,984
Current liabilities	216,556	186,600	246,512
Current ratio	1.82	1.72	1.91
Working capital	178,639	133,806	223,472
Working capital to gross inc	18.8 %	15.5 %	21.5 %
Term debt coverage ratio	0.91	-0.05	1.67
Replacement coverage ratio	0.68	-0.04	1.25
Term debt to EBITDA	4.59	19.99	2.38
Solvency (end of year at cost)			
Number of farms	38	19	19
Total assets	2,065,667	1,965,441	2,165,893
Total liabilities	849,343	898,735	799,950
Net worth	1,216,325	1,066,706	1,365,943
Net worth change	-35,007	-104,617	34,604
Farm debt to asset ratio	42 %	47 %	38 %
Total debt to asset ratio	41 %	46 %	37 %
Change in earned net worth %	-3 %	-9 %	3 %
Solvency (end of year at market)			
Number of farms	38	19	19
Total assets	3,281,245	2,788,934	3,773,557
Total liabilities	849,343	898,735	799,950
Net worth	2,431,903	1,890,199	2,973,607
Total net worth change	15,498	-102,613	133,610
Farm debt to asset ratio	27 %	34 %	22 %
Total debt to asset ratio	26 %	32 %	21 %
Change in total net worth %	1 %	-5 %	5 %
Nonfarm Information			
Net nonfarm income	12,867	12,363	13,371
Crop Acres			
Total crop acres	744	565	922
Total crop acres owned	384	261	507
Total crop acres cash rented	360	304	416
Total crop acres share rented	-	-	-
Machinery value per crop acre	948	1,000	915

Table 48

Summary Farm Income Statement
2015 MI Dairy Herds (100-249 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Crop sales	39,211	36,704	41,718
Crop inventory change	5,409	-5,441	16,258
Gross crop income	44,620	31,263	57,976
Livestock sales	760,741	730,642	790,840
Livestock inventory change	-40	-266	186
Gross livestock income	760,701	730,376	791,026
Government payments	16,333	13,856	18,809
Other cash farm income	132,790	110,005	155,575
Change in accounts receivable	-3,199	-6,215	-182
Gain or loss on hedging accounts	-	-	-
Change in other assets	2,844	-470	6,158
Gain or loss on breeding lvst	-2,089	-13,680	9,501
Gross farm income	951,999	865,136	1,038,862
Cash operating expenses	790,488	795,937	785,039
Change in prepaids and supplies	16,524	17,015	16,033
Change in growing crops	284	-716	1,284
Change in accounts payable	11,182	19,338	3,026
Depreciation	74,079	64,791	83,367
Total operating expense	892,557	896,365	888,749
Interest paid	26,690	28,730	24,650
Change in accrued interest	188	242	134
Total interest expense	26,878	28,972	24,784
Total expenses	919,435	925,338	913,533
Net farm income from operations	32,564	-60,202	125,330
Gain or loss on capital sales	-	-	-
Net farm income	32,564	-60,202	125,330

D. Financial Summary Information, Herds with 250-449 Cows

Table 49 Crop Production and Marketing Summary			
2015 MI Dairy Herds (250-449 Cows)			
(Farms Sorted By Rate of Return on Assets - Mkt)			
	Avg. Of All Farms	Low 50%	High 50%
Dairy			
Number of farms	16	8	8
Average number of cows	325	329	318
Milk production per cow lbs.,	26,889	25,678	28,238
Average milk price per cwt.,	\$16.55	\$15.69	\$16.50
Acreage Summary			
Total acres owned	377	275	480
Total crop acres	728	788	668
Crop acres owned	388	454	321
Crop acres cash rented	341	334	347
Crop acres share rented	-	-	-
Total pasture acres	-	-	-
Percent crop acres owned	53 %	58 %	48 %
Mach invest/crop acre cost	773	554	1,032
Mach invest/crop acre market	1,050	784	1,364
Average Price Received (Cash Sales Only)			
Wheat, Winter per bushel	4.23	-	4.90
Corn per bushel	3.42	-	-
Average Yield Per Acre			
Haylage, Alfalfa (ton)	10.94	-	-
Corn (bushel)	174.40	165.21	-
Soybeans (bushel)	54.05	-	-

Table 50

Farm Income Statement
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Cash Farm Income			
Corn	19,545	19,251	19,840
Oats	444	-	887
Soybeans	26,152	43,085	9,220
Wheat, Winter	10,208	14,042	6,375
Miscellaneous crop income	47	93	-
Beef Finishing	458	915	-
Dairy, Milk	1,449,460	1,403,027	1,495,894
Dairy, Dairy Calves	27,900	28,375	27,424
Dairy Heifers (for sale)	13,946	17,661	10,231
Dairy Finishing	30,713	1,059	60,367
Dairy Feeder	6,989	13,900	79
Dairy Backgrounding	298	-	597
Cull breeding livestock	127,003	112,661	141,344
Misc. livestock income	326	90	563
Crop government payments	10,637	2,501	18,773
CRP payments	1,091	2,181	-
Other government payments	12,098	15,339	8,857
Custom work income	3,777	-	7,554
Patronage dividends, cash	12,537	12,568	12,506
Crop insurance income	866	-	1,733
Property insurance income	5,291	-	10,581
Sale of resale items	188	-	375
Personal wages & salary	122	243	-
Other farm income	4,154	3,758	4,550
Gross Cash Farm Income	1,764,249	1,690,749	1,837,748

Table 50

Farm Income Statement (continued)
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Cash Farm Expense			
Seed	27,571	34,404	20,737
Fertilizer	36,110	30,248	41,972
Crop chemicals	14,200	14,057	14,343
Crop insurance	2,535	1,609	3,460
Drying expense	1,423	2,846	-
Crop packaging and supplies	163	-	325
Crop hauling and trucking	885	-	1,771
Crop marketing	349	697	-
Crop miscellaneous	3,584	2,114	5,053
Feeder livestock purchase	173	-	346
Purchased feed	554,404	601,067	507,742
Breeding fees	15,826	12,947	18,705
Veterinary	51,127	50,472	51,783
Livestock supplies	45,767	53,553	37,980
DHIA	3,084	2,767	3,401
Contract production exp.	27,248	4,274	50,222
Grazing fees	1,802	-	3,604
Govt program expense	223	-	446
Livestock hauling and trucking	59,329	59,790	58,867
Livestock marketing	19,193	20,481	17,905
Bedding	26,043	29,829	22,258
Livestock miscellaneous	1,033	-	2,065
Consultants	354	-	709
Interest	53,459	53,970	52,948
Packaging and supplies	12,832	25,665	-
Supplies	7,982	3,518	12,446
Fuel & oil	48,273	50,257	46,289
Repairs	66,786	54,992	78,580
Repair, machinery	8,307	10,842	5,772
Repair, livestock equip	606	-	1,211
Custom hire	27,321	34,693	19,949
Repair, buildings	9,900	7,700	12,099
Hired labor	272,683	250,139	295,227
Land rent	32,109	38,772	25,446
Machinery leases	14,191	10,476	17,907
Building leases	750	-	1,500
Real estate taxes	13,716	9,620	17,811
Personal property taxes	67	124	10
Farm insurance	26,938	24,744	29,131
Utilities	45,490	46,134	44,847
Dues & professional fees	12,074	6,951	17,198
Purchase of resale items	8,438	16,875	-
Miscellaneous	9,324	10,326	8,323
Total cash expense	1,563,670	1,576,953	1,550,387
Net cash farm income	200,578	113,796	287,361

Inventory Changes			
Prepays and supplies	5,365	-117	10,846
Accounts receivable	-7,672	-3,535	-11,810
Hedging accounts	364	728	-
Other current assets	19,114	34,982	3,247
Crops and feed	-28,955	-55,896	-2,014
Market livestock	967	213	1,721
Breeding livestock	-8,409	9,207	-26,025
Other assets	9,155	13,010	5,301
Accounts payable	-15,374	-21,151	-9,596
Accrued interest	-913	-949	-876
Total inventory change	-26,357	-23,509	-29,206
Net operating profit	174,221	90,287	258,155
Depreciation			
Machinery and equipment	-55,013	-36,716	-73,310
Titled vehicles	-488	-	-975
Buildings and improvements	-54,518	-46,251	-62,785
Total depreciation	-110,019	-82,967	-137,071
Net farm income from operations	64,202	7,320	121,085
Gain or loss on capital sales	-	-	-
Net farm income	64,202	7,320	121,085

Table 51

Inventory Changes
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Net cash farm income	200,578	113,796	287,361
Crops and Feed			
Ending inventory	356,388	346,276	366,499
Beginning inventory	385,342	402,172	368,513
Inventory change	-28,955	-55,896	-2,014
Market Livestock			
Ending inventory	18,805	5,847	31,763
Beginning inventory	17,838	5,634	30,041
Inventory change	967	213	1,721
Accts Receivable			
Ending inventory	54,954	56,463	53,446
Beginning inventory	62,627	59,998	65,256
Inventory change	-7,672	-3,535	-11,810
Prepaid Expenses and Supplies			
Ending inventory	63,093	26,219	99,967
Beginning inventory	57,728	26,336	89,121
Inventory change	5,365	-117	10,846
Hedging Activities			
Ending inventory	-	-	-
Withdrawals	364	728	-
Beginning inventory	-	-	-
Deposits	-	-	-
Gain or loss	364	728	-
Other Current Assets			
Ending inventory	30,282	28,076	32,489
Beginning inventory	11,168	-6,906	29,242
Inventory change	19,114	34,982	3,247
Breeding Livestock			
Ending inventory	830,345	783,415	877,274
Capital sales	11,268	22,537	-
Beginning inventory	841,181	779,382	902,980
Capital purchases	8,840	17,362	319
Depreciation, capital adjust	-8,409	9,207	-26,025
Other Capital Assets			
Ending inventory	94,464	65,293	123,634
Capital sales	8,574	13,485	3,663
Beginning inventory	83,201	56,996	109,407
Capital purchases	10,681	8,773	12,588
Depreciation, capital adjust	9,155	13,010	5,301
Accounts Payable			
Beginning inventory	36,218	53,803	18,634
Ending inventory	51,592	74,954	28,230
Inventory change	-15,374	-21,151	-9,596
Accrued Interest			
Beginning inventory	842	1,471	213
Ending inventory	1,754	2,421	1,088
Inventory change	-913	-949	-876
Total inventory change	-26,357	-23,509	-29,206
Net operating profit	174,221	90,287	258,155

Table 52

Depreciation
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Net operating profit	174,221	90,287	258,155
Machinery and Equipment			
Ending inventory	579,054	460,314	697,794
Capital sales	2,022	3,481	563
Beginning inventory	532,091	401,992	662,189
Capital purchases	103,998	98,520	109,477
Depreciation, capital adjust.	-55,013	-36,716	-73,310
Titled Vehicles			
Ending inventory	7,513	5,625	9,400
Capital sales	-	-	-
Beginning inventory	8,000	5,625	10,375
Capital purchases	-	-	-
Depreciation, capital adjust.	-488	-	-975
Buildings and Improvements			
Ending inventory	853,555	670,754	1,036,356
Capital sales	88	176	-
Beginning inventory	821,869	656,093	987,644
Capital purchases	86,293	61,089	111,497
Depreciation, capital adjust.	-54,518	-46,251	-62,785
Total depreciation, capital adj.	-110,019	-82,967	-137,071
Net farm income from operations	64,202	7,320	121,085
Gain or loss on capital sales	-	-	-
Net farm income	64,202	7,320	121,085

Table 53

Profitability Measures
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Profitability (assets valued at cost)			
Net farm income from operations	64,202	7,320	121,085
Rate of return on assets	1.0 %	-0.6 %	2.3 %
Rate of return on equity	-0.9 %	-4.1 %	1.5 %
Operating profit margin	3.0 %	-1.9 %	7.0 %
Asset turnover rate	32.7 %	33.2 %	32.3 %
Farm interest expense	54,371	54,919	53,824
Value of operator lbr and mgmt.	83,194	82,637	83,750
Return on farm assets	35,380	-20,399	91,159
Average farm assets	3,602,626	3,187,405	4,017,847
Return on farm equity	-18,991	-75,318	37,335
Average farm equity	2,129,781	1,841,594	2,417,968
Value of farm production	1,177,279	1,058,409	1,296,150
	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Profitability (assets valued at market)			
Net farm income from operations	133,352	28,638	238,067
Rate of return on assets	2.2 %	0.0 %	3.8 %
Rate of return on equity	1.5 %	-2.0 %	4.0 %
Operating profit margin	8.9 %	0.1 %	16.1 %
Asset turnover rate	24.8 %	26.5 %	23.6 %
Farm interest expense	54,371	54,919	53,824
Value of operator lbr and mgmt.	83,194	82,637	83,750
Return on farm assets	104,530	920	208,140
Average farm assets	4,745,846	3,988,019	5,503,674
Return on farm equity	50,159	-53,999	154,317
Average farm equity	3,273,001	2,642,208	3,903,794
Value of farm production	1,177,279	1,058,409	1,296,150

Table 54

Liquidity & Repayment Capacity Measures
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Liquidity			
Current ratio	2.28	1.98	2.58
Working capital	317,630	249,708	385,551
Working capital to gross inc	18.3 %	14.9 %	21.4 %
Current assets	566,410	503,864	628,955
Current liabilities	248,780	254,156	243,404
Gross revenues (accrual)	1,740,294	1,676,350	1,804,238
Repayment capacity			
Net farm income from operations	64,202	7,320	121,085
Depreciation	110,019	82,967	137,071
Personal income	6,778	11,197	2,360
Family living/owner withdrawals	-73,822	-67,684	-79,960
Cash discrepancy	0	0	-
Payments on personal debt	-2,199	-2,114	-2,283
Income taxes paid	-983	-1,201	-765
Interest on term debt	69,279	69,177	69,381
Capital debt repayment capacity	173,275	99,661	246,888
Scheduled term debt payments	-164,221	-149,856	-178,586
Capital debt repayment margin	9,054	-50,195	68,303
Cash replacement allowance	-33,384	-24,132	-42,636
Replacement margin	-24,330	-74,327	25,666
Term debt coverage ratio	1.06	0.67	1.38
Replacement coverage ratio	0.88	0.57	1.12

Table 55

Balance Sheet at Cost Values
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 50%		High 50%	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Number of farms	16		8		8	
Assets						
Current Farm Assets						
Cash and checking balance	52,667	42,888	37,544	40,984	67,791	44,793
Prepaid expenses & supplies	57,728	63,093	26,336	26,219	89,121	99,967
Growing crops	28,091	36,610	28,094	41,201	28,089	32,020
Accounts receivable	62,627	54,954	59,998	56,463	65,256	53,446
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	385,342	356,388	402,172	346,276	368,513	366,499
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	17,838	18,805	5,634	5,847	30,041	31,763
Other current assets	-16,923	-6,328	-35,000	-13,125	1,153	469
Total current farm assets	587,371	566,410	524,777	503,864	649,964	628,955
Intermediate Farm Assets						
Breeding livestock	841,181	830,345	779,382	783,415	902,980	877,274
Machinery and equipment	532,091	579,054	401,992	460,314	662,189	697,794
Titled vehicles	8,000	7,513	5,625	5,625	10,375	9,400
Other intermediate assets	65,777	70,549	39,607	38,851	91,947	102,248
Total intermediate farm assets	1,447,049	1,487,461	1,226,606	1,288,204	1,667,491	1,686,717
Long Term Farm Assets						
Farm land	675,625	724,574	730,339	730,339	620,910	718,810
Buildings and improvements	821,869	853,555	656,093	670,754	987,644	1,036,356
Other long-term assets	17,425	23,914	17,389	26,442	17,461	21,386
Total long-term farm assets	1,514,918	1,602,044	1,403,821	1,427,536	1,626,015	1,776,552
Total Farm Assets	3,549,337	3,655,914	3,155,204	3,219,605	3,943,470	4,092,224
Total Nonfarm Assets	409,755	412,365	104,640	108,827	714,869	715,903
Total Assets	3,959,092	4,068,279	3,259,845	3,328,431	4,658,340	4,808,127
Liabilities						
Current Farm Liabilities						
Accrued interest	842	1,754	1,471	2,421	213	1,088
Accounts payable	36,218	51,592	53,803	74,954	18,634	28,230
Current notes	57,677	82,144	70,278	94,066	45,077	70,222
Government crop loans	0	0	0	0	0	0
Principal due on term debt	94,942	113,289	80,680	82,716	109,205	143,863
Total current farm liabilities	189,680	248,780	206,232	254,156	173,127	243,404
Total intermediate farm liabs	280,897	317,635	160,406	262,570	401,387	372,700
Total long term farm liabilities	939,232	969,467	914,906	893,352	963,559	1,045,582
Total farm liabilities	1,409,808	1,535,882	1,281,544	1,410,078	1,538,073	1,661,685
Total nonfarm liabilities	20,328	20,043	35,232	32,907	5,425	7,178
Total liabilities	1,430,136	1,555,925	1,316,775	1,442,985	1,543,498	1,668,864
Net worth (farm and nonfarm)	2,528,956	2,512,354	1,943,070	1,885,446	3,114,842	3,139,263
Net worth change		-16,601		-57,624		24,421
Percent net worth change		-1 %		-3 %		1 %
Ratio Analysis						
Current farm liabilities / assets	32 %	44 %	39 %	50 %	27 %	39 %
Intermediate farm liab. / assets	19 %	21 %	13 %	20 %	24 %	22 %
Long term farm liab. / assets	62 %	61 %	65 %	63 %	59 %	59 %
Total debt to asset ratio	36 %	38 %	40 %	43 %	33 %	35 %

Table 56

Balance Sheet at Market Values
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

Number of farms	Avg. Of All Farms 16		Low 50% 8		High 50% 8	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	52,667	42,888	37,544	40,984	67,791	44,793
Prepaid expenses & supplies	57,728	63,093	26,336	26,219	89,121	99,967
Growing crops	28,091	36,610	28,094	41,201	28,089	32,020
Accounts receivable	62,627	54,954	59,998	56,463	65,256	53,446
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	385,342	356,388	402,172	346,276	368,513	366,499
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	17,838	18,805	5,634	5,847	30,041	31,763
Other current assets	-16,923	-6,328	-35,000	-13,125	1,153	469
Total current farm assets	587,371	566,410	524,777	503,864	649,964	628,955
Intermediate Farm Assets						
Breeding livestock	841,181	830,345	779,382	783,415	902,980	877,274
Machinery and equipment	709,425	776,487	560,612	640,253	858,237	912,721
Titled vehicles	22,173	21,686	17,878	17,878	26,469	25,494
Other intermediate assets	65,777	70,549	39,607	38,851	91,947	102,248
Total intermediate farm assets	1,638,556	1,699,067	1,397,479	1,480,396	1,879,633	1,917,737
Long Term Farm Assets						
Farm land	1,400,100	1,486,950	1,265,154	1,265,154	1,535,046	1,708,746
Buildings and improvements	1,014,755	1,057,593	740,807	755,468	1,288,702	1,359,717
Other long-term assets	17,201	23,691	16,942	25,996	17,461	21,386
Total long-term farm assets	2,432,056	2,568,233	2,022,903	2,046,618	2,841,208	3,089,849
Total Farm Assets	4,657,983	4,833,710	3,945,159	4,030,878	5,370,806	5,636,541
Total Nonfarm Assets	486,711	489,321	169,953	174,139	803,469	804,502
Total Assets	5,144,693	5,323,030	4,115,112	4,205,018	6,174,274	6,441,043
Liabilities						
Current Farm Liabilities						
Accrued interest	842	1,754	1,471	2,421	213	1,088
Accounts payable	36,218	51,592	53,803	74,954	18,634	28,230
Current notes	57,677	82,144	70,278	94,066	45,077	70,222
Government crop loans	0	0	0	0	0	0
Principal due on term debt	94,942	113,289	80,680	82,716	109,205	143,863
Total current farm liabilities	189,680	248,780	206,232	254,156	173,127	243,404
Total intermediate farm liabs	280,897	317,635	160,406	262,570	401,387	372,700
Total long term farm liabilities	939,232	969,467	914,906	893,352	963,559	1,045,582
Total farm liabilities	1,409,808	1,535,882	1,281,544	1,410,078	1,538,073	1,661,685
Total nonfarm liabilities	20,328	20,043	35,232	32,907	5,425	7,178
Total liabs excluding deferreds	1,430,136	1,555,925	1,316,775	1,442,985	1,543,498	1,668,864
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	1,430,136	1,555,925	1,316,775	1,442,985	1,543,498	1,668,864
Retained earnings	2,528,956	2,512,354	1,943,070	1,885,446	3,114,842	3,139,263
Market valuation equity	1,185,601	1,254,751	855,268	876,586	1,515,935	1,632,916
Net worth (farm and nonfarm)	3,714,557	3,767,106	2,798,337	2,762,032	4,630,777	4,772,179
Net worth excluding deferreds	3,714,557	3,767,106	2,798,337	2,762,032	4,630,777	4,772,179
Net worth change		52,549		-36,305		141,402
Percent net worth change		1 %		-1 %		3 %
Ratio Analysis						
Current farm liabilities / assets	32 %	44 %	39 %	50 %	27 %	39 %
Intermediate farm liab. / assets	17 %	19 %	11 %	18 %	21 %	19 %
Long term farm liab. / assets	39 %	38 %	45 %	44 %	34 %	34 %
Total debt to asset ratio	28 %	29 %	32 %	34 %	25 %	26 %
Debt to assets excl deferreds	28 %	29 %	32 %	34 %	25 %	26 %

Table 57

Statement Of Cash Flows
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Beginning cash (farm & nonfarm)	53,030	37,544	68,516
Cash Provided By Operating Activities			
Gross cash farm income	1,764,249	1,690,749	1,837,748
Total cash farm expense	-1,563,670	-1,576,953	-1,550,387
Net cash from hedging transactions	364	728	-
Cash provided by operating	200,942	114,523	287,361
Cash Provided By Investing Activities			
Sale of breeding livestock	11,268	22,537	-
Sale of machinery & equipment	2,022	3,481	563
Sale of titled vehicles	-	-	-
Sale of farm land	4,742	-	9,484
Sale of farm buildings	88	176	-
Sale of other farm assets	8,574	13,485	3,663
Sale of nonfarm assets	-	-	-
Purchase of breeding livestock	-8,840	-17,362	-319
Purchase of machinery & equip.	-103,998	-98,520	-109,477
Purchase of titled vehicles	-	-	-
Purchase of farm land	-53,692	-	-107,384
Purchase of farm buildings	-86,293	-61,089	-111,497
Purchase of other farm assets	-10,681	-8,773	-12,588
Purchase of nonfarm assets	-11,572	-9,767	-13,376
Cash provided by investing	-248,382	-155,830	-340,933
Cash Provided By Financing Activities			
Money borrowed	325,558	353,051	298,064
Principal payments	-218,339	-248,741	-187,938
Personal income	6,778	11,197	2,360
Family living/owner withdrawals	-73,822	-67,684	-79,960
Income and social security tax	-983	-1,201	-765
Capital contributions	1,141	-	2,282
Capital distributions	-	-	-
Dividends paid	-	-	-
Cash gifts and inheritances	453	-	906
Gifts given	-2,188	-	-4,375
Other cash flows	-	-	-
Cash provided by financing	38,598	46,623	30,573
Net change in cash balance	-8,842	5,315	-22,999
Ending cash (farm & nonfarm)	44,188	42,859	45,518
Discrepancy	0	0	-

Table 58

Financial Standards Measures
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Liquidity			
Current ratio	2.28	1.98	2.58
Working capital	317,630	249,708	385,551
Working capital to gross inc	18.3 %	14.9 %	21.4 %
Solvency (market)			
Farm debt to asset ratio	32 %	35 %	29 %
Farm equity to asset ratio	68 %	65 %	71 %
Farm debt to equity ratio	0.47	0.54	0.42
Profitability (cost)			
Rate of return on farm assets	1.0 %	-0.6 %	2.3 %
Rate of return on farm equity	-0.9 %	-4.1 %	1.5 %
Operating profit margin	3.0 %	-1.9 %	7.0 %
Net farm income	64,202	7,320	121,085
EBITDA	228,593	145,206	311,979
Repayment Capacity			
Capital debt repayment capacity	173,275	99,661	246,888
Capital debt repayment margin	9,054	-50,195	68,303
Replacement margin	-24,330	-74,327	25,666
Term debt coverage ratio	1.06	0.67	1.38
Replacement coverage ratio	0.88	0.57	1.12
Efficiency			
Asset turnover rate (cost)	32.7 %	33.2 %	32.3 %
Operating expense ratio	86.9 %	91.3 %	82.7 %
Depreciation expense ratio	6.3 %	4.9 %	7.6 %
Interest expense ratio	3.1 %	3.3 %	3.0 %
Net farm income ratio	3.7 %	0.4 %	6.7 %

Table 59

Operator and Labor Information
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Operator Information			
Average number of operators	1.6	1.5	1.6
Average age of operators	52.5	50.6	54.2
Average number of years farming	24.6	21.4	27.5
Results Per Operator			
Working capital	203,283	166,472	237,262
Total assets (market)	3,406,739	2,803,345	3,963,719
Total liabilities	995,792	961,990	1,026,993
Net worth (market)	2,410,948	1,841,355	2,936,726
Net worth excl deferred liabs	2,410,948	1,841,355	2,936,726
Gross farm income	1,113,788	1,117,567	1,110,300
Total farm expense	1,072,699	1,112,687	1,035,786
Net farm income from operations	41,089	4,880	74,514
Net nonfarm income	4,338	7,465	1,452
Family living & tax withdrawals	47,875	45,923	49,677
Total acres owned	241.5	183.4	295.1
Total crop acres	466.1	525.6	411.2
Crop acres owned	248.2	302.8	197.7
Crop acres cash rented	217.9	222.7	213.5
Crop acres share rented	-	-	-
Total pasture acres	-	-	-
Labor Analysis			
Number of farms	16	8	8
Total unpaid labor hours	4,870	5,162	4,579
Total hired labor hours	17,691	17,913	17,470
Total labor hours per farm	22,562	23,075	22,049
Unpaid hours per operator	3,117	3,441	2,818
Value of farm production / hour	52.18	45.87	58.78
Net farm income / unpaid hour	13.18	1.42	26.44
Average hourly hired labor wage	15.41	13.96	16.90
Partnerships & LLCs			
Number of farms	8	4	4
Number of operators	2.1	2.0	2.3
Owner withdrawals per farm	80,116	-	-
Withdrawals per operator	35,607	-	-

Table 60

Financial Summary

2015 MI Dairy Herds (250-449 Cows)

(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		
	All Farms	Low 50%	High 50%
Number of farms	16	8	8
Income Statement			
Gross cash farm income	1,764,249	1,690,749	1,837,748
Total cash farm expense	1,563,670	1,576,953	1,550,387
Net cash farm income	200,578	113,796	287,361
Inventory change	-26,357	-23,509	-29,206
Depreciation	-110,019	-82,967	-137,071
Net farm income from operations	64,202	7,320	121,085
Gain or loss on capital sales	-	-	-
Average net farm income	64,202	7,320	121,085
Median net farm income	92,324	22,299	135,862
Profitability (cost)			
Rate of return on assets	1.0 %	-0.6 %	2.3 %
Rate of return on equity	-0.9 %	-4.1 %	1.5 %
Operating profit margin	3.0 %	-1.9 %	7.0 %
Asset turnover rate	32.7 %	33.2 %	32.3 %
Profitability (market)			
Rate of return on assets	2.2 %	0.0 %	3.8 %
Rate of return on equity	1.5 %	-2.0 %	4.0 %
Operating profit margin	8.9 %	0.1 %	16.1 %
Asset turnover rate	24.8 %	26.5 %	23.6 %
Liquidity & Repayment (end of year)			
Current assets	566,410	503,864	628,955
Current liabilities	248,780	254,156	243,404
Current ratio	2.28	1.98	2.58
Working capital	317,630	249,708	385,551
Working capital to gross inc	18.3 %	14.9 %	21.4 %
Term debt coverage ratio	1.06	0.67	1.38
Replacement coverage ratio	0.88	0.57	1.12
Term debt to EBITDA	5.34	7.41	4.38
Solvency (end of year at cost)			
Number of farms	16	8	8
Total assets	4,068,279	3,328,431	4,808,127
Total liabilities	1,555,925	1,442,985	1,668,864
Net worth	2,512,354	1,885,446	3,139,263
Net worth change	-16,601	-57,624	24,421
Farm debt to asset ratio	42 %	44 %	41 %
Total debt to asset ratio	38 %	43 %	35 %
Change in earned net worth %	-1 %	-3 %	1 %
Solvency (end of year at market)			
Number of farms	16	8	8
Total assets	5,323,030	4,205,018	6,441,043
Total liabilities	1,555,925	1,442,985	1,668,864
Net worth	3,767,106	2,762,032	4,772,179
Total net worth change	52,549	-36,305	141,402
Farm debt to asset ratio	32 %	35 %	29 %
Total debt to asset ratio	29 %	34 %	26 %
Change in total net worth %	1 %	-1 %	3 %
Nonfarm Information			
Net nonfarm income	6,778	11,197	2,360
Crop Acres			
Total crop acres	728	788	668
Total crop acres owned	388	454	321
Total crop acres cash rented	341	334	347
Total crop acres share rented	-	-	-
Machinery value per crop acre	1,050	784	1,364

Table 61

Summary Farm Income Statement
2015 MI Dairy Herds (250-449 Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Crop sales	56,396	76,470	36,321
Crop inventory change	-28,955	-55,896	-2,014
Gross crop income	27,441	20,574	34,307
Livestock sales	1,529,764	1,464,936	1,594,591
Livestock inventory change	967	213	1,721
Gross livestock income	1,530,731	1,465,149	1,596,313
Government payments	23,825	20,021	27,630
Other cash farm income	154,264	129,321	179,206
Change in accounts receivable	-7,672	-3,535	-11,810
Gain or loss on hedging accounts	364	728	-
Change in other assets	19,751	34,885	4,617
Gain or loss on breeding lvst	-8,409	9,207	-26,025
Gross farm income	1,740,294	1,676,350	1,804,238
Cash operating expenses	1,510,211	1,522,983	1,497,439
Change in prepaids and supplies	-5,365	117	-10,846
Change in growing crops	-8,519	-13,107	-3,931
Change in accounts payable	15,374	21,151	9,596
Depreciation	110,019	82,967	137,071
Total operating expense	1,621,720	1,614,112	1,629,329
Interest paid	53,459	53,970	52,948
Change in accrued interest	913	949	876
Total interest expense	54,371	54,919	53,824
Total expenses	1,676,092	1,669,031	1,683,153
Net farm income from operations	64,202	7,320	121,085
Gain or loss on capital sales	-	-	-
Net farm income	64,202	7,320	121,085

E. Financial Summary Information, Herds with 450 + Cows

Table 62 Crop Production and Marketing Summary
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Dairy			
Number of farms	21	10	11
Average number of cows	812	846	764
Milk production per cow lbs.,	26,253	27,156	25,356
Average milk price per cwt.,	\$17.75	\$16.44	\$18.90
Acreage Summary			
Total acres owned	928	673	1,160
Total crop acres	1,815	1,673	1,945
Crop acres owned	978	726	1,207
Crop acres cash rented	834	941	738
Crop acres share rented	3	6	-
Total pasture acres	13	2	23
Percent crop acres owned	54 %	43 %	62 %
Mach invest/crop acre cost	724	785	677
Mach invest/crop acre market	1,129	895	1,312
Average Price Received (Cash Sales Only)			
Corn per bushel	3.79	-	-
Soybeans per bushel	9.27	9.33	-
Wheat, Winter per bushel	4.58	-	-
Average Yield Per Acre			
Corn Silage (ton)	22.24	-	22.83
Haylage, Alfalfa (ton)	10.60	-	10.50
Corn (bushel)	152.12	-	156.27

Table 63

Farm Income Statement
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Cash Farm Income			
Beans, Black Turtle	1,408	-	2,687
Corn	125,181	49,277	194,186
Corn Silage	2,888	-	5,514
Hay, Alfalfa	540	1,133	-
Hay, Mixed	320	-	611
Haylage, Alfalfa	39,475	-	75,362
Haylage, Mixed	907	-	1,732
Oats	389	-	742
Soybeans	93,261	68,074	116,159
Straw	880	1,848	-
Sugar Beets	13,786	-	26,319
Wheat, Spring	9,682	6,945	12,170
Wheat, Winter	18,556	21,082	16,260
Soybeans, Organic	464	-	886
User Added Crop	18,074	-	34,504
Miscellaneous crop income	49	-	93
Beef Cow-Calf, Beef Calves	8,950	3,420	13,977
Dairy, Milk	3,674,219	3,764,369	3,592,265
Dairy, Dairy Calves	103,659	110,302	97,619
Dairy Heifers (for sale)	3,221	6,686	71
Dairy Replacement Heifers	52,119	51,446	52,731
Dairy Finishing	36,636	32,169	40,696
Dairy Feeder	37,062	159	70,610
Dairy Backgrounding	569	-	1,085
Cull breeding livestock	310,187	269,116	347,524
Misc. livestock income	57	120	-
Crop government payments	39,894	48,423	32,140
Other government payments	21,275	12,388	29,355
Custom work income	31,009	5,252	54,424
Patronage dividends, cash	28,802	25,951	31,394
Crop insurance income	36,019	65,040	9,636
Property insurance income	21,778	5,614	36,472
Sale of resale items	40,240	-	76,822
Livestock insurance inc	643	1,350	-
Real estate tax refund	3,650	7,665	-
Other farm income	131,353	179,027	88,012
Gross Cash Farm Income	4,907,200	4,736,855	5,062,059

Table 63

Farm Income Statement (continued)
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Cash Farm Expense			
Seed	147,448	149,830	145,282
Fertilizer	119,517	102,193	135,266
Crop chemicals	65,248	64,800	65,655
Crop insurance	17,107	6,601	26,657
Drying expense	2,812	3,681	2,022
Storage	1,077	14	2,044
Irrigation energy	240	-	459
Crop packaging and supplies	3,160	6,636	-
Crop fuel & oil	2,185	-	4,172
Crop hauling and trucking	1,349	1,872	873
Crop marketing	4,970	1,226	8,373
Crop miscellaneous	43,258	10,479	73,058
Crop consultants	388	119	632
Purchased feed	1,234,125	1,389,184	1,093,163
Breeding fees	32,318	27,879	36,353
Veterinary	107,697	122,682	94,075
Livestock supplies	86,588	78,144	94,264
DHIA	3,121	4,994	1,418
Contract production exp.	90,786	64,092	115,054
Livestock insurance	504	1,058	-
Livestock hauling and trucking	103,935	103,480	104,349
Livestock marketing	42,438	35,244	48,979
Bedding	43,414	40,763	45,825
Livestock consultants	4,681	7,710	1,927
Interest	151,574	178,987	126,653
Packaging and supplies	4,520	8,053	1,308
Supplies	77,798	59,540	94,397
Fuel & oil	121,395	108,228	133,365
Repairs	170,302	137,683	199,956
Repair, machinery	59,082	53,091	64,529
Repair, livestock equip	2,318	4,868	-
Custom hire	146,714	125,553	165,951
Repair, buildings	20,171	14,426	25,395
Hired labor	686,398	664,107	706,662
Land rent	181,894	206,110	159,881
Machinery leases	38,493	62,167	16,970
Building leases	77,529	155,920	6,265
Real estate taxes	34,552	24,177	43,985
Personal property taxes	893	1,294	529
Farm insurance	59,059	55,786	62,035
Utilities	97,242	92,889	101,200
Hauling and trucking	5,014	-	9,571
Marketing	5,237	10,871	115
Dues & professional fees	21,597	22,736	20,561
Miscellaneous	18,745	16,725	20,581

Total cash expense	4,138,894	4,225,889	4,059,807
Net cash farm income	768,306	510,966	1,002,251
Inventory Changes			
Prepays and supplies	-148,190	-134,959	-160,218
Accounts receivable	-120,549	-129,855	-112,089
Hedging accounts	1,828	3,838	-
Other current assets	2,890	-3,905	9,068
Crops and feed	40,277	-59,123	130,641
Market livestock	-14,084	6,301	-32,615
Breeding livestock	61,675	38,628	82,627
Other assets	-26,486	2,100	-52,474
Accounts payable	801	-73,823	68,641
Accrued interest	-2,529	-5,515	185
Total inventory change	-204,367	-356,313	-66,234
Net operating profit	563,939	154,653	936,018
Depreciation			
Machinery and equipment	-189,570	-125,408	-247,899
Titled vehicles	-423	-	-808
Buildings and improvements	-122,568	-122,204	-122,898
Total depreciation	-312,561	-247,612	-371,605
Net farm income from operations	251,378	-92,959	564,413
Gain or loss on capital sales	-	-	-
Net farm income	251,378	-92,959	564,413

Table 64

Inventory Changes
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		
	All Farms	Low 50%	High 50%
Number of farms	21	10	11
Net cash farm income	768,306	510,966	1,002,251
Crops and Feed			
Ending inventory	1,152,741	892,088	1,389,699
Beginning inventory	1,112,464	951,211	1,259,058
Inventory change	40,277	-59,123	130,641
Market Livestock			
Ending inventory	81,550	31,185	127,336
Beginning inventory	95,633	24,884	159,951
Inventory change	-14,084	6,301	-32,615
Accts Receivable			
Ending inventory	202,395	234,213	173,469
Beginning inventory	322,944	364,068	285,558
Inventory change	-120,549	-129,855	-112,089
Prepaid Expenses and Supplies			
Ending inventory	226,411	218,980	233,166
Beginning inventory	374,601	353,938	393,384
Inventory change	-148,190	-134,959	-160,218
Hedging Activities			
Ending inventory	929	1,950	-
Withdrawals	899	1,888	-
Beginning inventory	-	-	-
Deposits	-	-	-
Gain or loss	1,828	3,838	-
Other Current Assets			
Ending inventory	72,528	44,265	98,222
Beginning inventory	69,638	48,170	89,154
Inventory change	2,890	-3,905	9,068
Breeding Livestock			
Ending inventory	2,591,183	2,738,968	2,456,833
Capital sales	85,794	171,047	8,292
Beginning inventory	2,329,649	2,333,385	2,326,252
Capital purchases	285,653	538,002	56,245
Depreciation, capital adjust	61,675	38,628	82,627
Other Capital Assets			
Ending inventory	304,549	266,740	338,920
Capital sales	56,657	59,976	53,640
Beginning inventory	277,412	228,263	322,093
Capital purchases	110,280	96,352	122,941
Depreciation, capital adjust	-26,486	2,100	-52,474
Accounts Payable			
Beginning inventory	182,523	213,753	154,132
Ending inventory	181,722	287,576	85,491
Inventory change	801	-73,823	68,641
Accrued Interest			
Beginning inventory	3,533	3,632	3,443
Ending inventory	6,062	9,147	3,258
Inventory change	-2,529	-5,515	185
Total inventory change	-204,367	-356,313	-66,234
Net operating profit	563,939	154,653	936,018

Table 65

Depreciation
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Net operating profit	563,939	154,653	936,018
Machinery and Equipment			
Ending inventory	1,487,863	1,437,328	1,533,804
Capital sales	12,753	10,031	15,227
Beginning inventory	1,264,055	1,171,207	1,348,463
Capital purchases	426,130	401,560	448,467
Depreciation, capital adjust.	-189,570	-125,408	-247,899
Titled Vehicles			
Ending inventory	201,009	9,225	375,358
Capital sales	-	-	-
Beginning inventory	9,251	9,225	9,274
Capital purchases	-	-	-
Depreciation, capital adjust.	-423	-	-808
Buildings and Improvements			
Ending inventory	2,064,943	2,566,502	1,608,980
Capital sales	538	396	667
Beginning inventory	1,887,597	2,048,501	1,741,322
Capital purchases	492,634	640,602	358,117
Depreciation, capital adjust.	-122,568	-122,204	-122,898
Total depreciation, capital adj.	-312,561	-247,612	-371,605
Net farm income from operations	251,378	-92,959	564,413
Gain or loss on capital sales	-	-	-
Net farm income	251,378	-92,959	564,413

Table 66

Profitability Measures
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	20	10	11
Profitability (assets valued at cost)			
Net farm income from operations	239,150	-92,959	571,260
Rate of return on assets	2.6 %	-0.3 %	5.0 %
Rate of return on equity	1.6 %	-4.2 %	5.6 %
Operating profit margin	7.0 %	-0.9 %	13.1 %
Asset turnover rate	36.6 %	34.5 %	38.4 %
Farm interest expense	158,119	184,502	131,736
Value of operator lbr and mgmt.	138,740	119,149	158,332
Return on farm assets	258,529	-27,606	544,663
Average farm assets	10,043,687	9,289,905	10,797,469
Return on farm equity	100,410	-212,107	412,928
Average farm equity	6,238,259	5,081,554	7,394,963
Value of farm production	3,676,625	3,209,645	4,143,605
	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Profitability (assets valued at market)			
Net farm income from operations	458,497	-192,163	1,050,005
Rate of return on assets	3.5 %	-1.1 %	6.5 %
Rate of return on equity	3.2 %	-4.4 %	7.3 %
Operating profit margin	12.9 %	-4.0 %	25.2 %
Asset turnover rate	26.8 %	28.4 %	25.8 %
Farm interest expense	154,103	184,502	126,468
Value of operator lbr and mgmt.	144,038	119,149	166,665
Return on farm assets	468,561	-126,809	1,009,807
Average farm assets	13,514,276	11,299,664	15,527,560
Return on farm equity	314,458	-311,311	883,339
Average farm equity	9,716,560	7,091,313	12,103,148
Value of farm production	3,623,510	3,209,645	3,999,752

Table 67

Liquidity & Repayment Capacity Measures
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Liquidity			
Current ratio	2.39	1.36	4.05
Working capital	1,212,824	413,736	1,939,267
Working capital to gross inc	25.0 %	9.0 %	38.1 %
Current assets	2,086,473	1,548,714	2,575,345
Current liabilities	873,649	1,134,978	636,078
Gross revenues (accrual)	4,857,635	4,598,828	5,092,915
Repayment capacity			
Net farm income from operations	251,378	-92,959	564,413
Depreciation	312,561	247,612	371,605
Personal income	30,486	5,558	53,148
Family living/owner withdrawals	-169,062	-92,758	-238,428
Cash discrepancy	0	0	0
Payments on personal debt	-5,739	-1,738	-9,377
Income taxes paid	-39,805	-	-75,992
Interest on term debt	155,691	165,417	146,850
Capital debt repayment capacity	535,510	231,131	812,219
Scheduled term debt payments	-408,860	-407,104	-410,457
Capital debt repayment margin	126,650	-175,973	401,762
Cash replacement allowance	-83,255	-52,251	-111,441
Replacement margin	43,395	-228,224	290,321
Term debt coverage ratio	1.31	0.57	1.98
Replacement coverage ratio	1.09	0.50	1.56

Table 68

Balance Sheet at Cost Values
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 50%		High 50%	
Number of farms	21		10		11	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	366,700	351,401	150,419	119,357	582,981	583,445
Prepaid expenses & supplies	388,160	232,683	353,938	218,980	422,382	246,387
Growing crops	56,297	51,106	47,319	43,329	65,275	58,882
Accounts receivable	333,240	206,946	364,068	234,213	302,413	179,678
Hedging accounts	0	975	0	1,950	0	0
Crops held for sale or feed	1,141,680	1,183,166	953,283	890,015	1,330,076	1,476,318
Crops under government loan	0	4,375	0	8,750	0	0
Market livestock held for sale	100,415	85,607	24,884	31,185	175,946	140,030
Other current assets	15,533	23,696	851	935	30,215	46,457
Total current farm assets	2,402,025	2,139,956	1,894,762	1,548,714	2,909,287	2,731,197
Intermediate Farm Assets						
Breeding livestock	2,348,036	2,622,657	2,333,385	2,738,968	2,362,688	2,506,346
Machinery and equipment	1,255,057	1,487,766	1,171,207	1,437,328	1,338,908	1,538,205
Titled vehicles	9,713	9,269	9,225	9,225	10,201	9,313
Other intermediate assets	227,415	256,428	168,413	210,233	286,418	302,624
Total intermediate farm assets	3,840,222	4,376,121	3,682,230	4,395,754	3,998,214	4,356,487
Long Term Farm Assets						
Farm land	1,535,075	1,745,785	1,123,269	1,208,325	1,946,882	2,283,246
Buildings and improvements	1,791,999	2,168,190	2,048,501	2,566,502	1,535,497	1,769,878
Other long-term assets	44,898	45,405	59,850	56,507	29,947	34,303
Total long-term farm assets	3,371,972	3,959,381	3,231,619	3,831,334	3,512,325	4,087,427
Total Farm Assets	9,614,219	10,475,457	8,808,612	9,775,803	10,419,827	11,175,111
Total Nonfarm Assets	342,683	370,424	54,701	58,244	630,666	682,603
Total Assets	9,956,902	10,845,881	8,863,312	9,834,047	11,050,493	11,857,715
Liabilities						
Current Farm Liabilities						
Accrued interest	3,705	6,363	3,632	9,152	3,778	3,575
Accounts payable	190,088	190,608	213,753	287,576	166,423	93,640
Current notes	226,485	345,053	243,622	413,825	209,347	276,282
Government crop loans	0	2,300	0	4,600	0	0
Principal due on term debt	256,940	353,887	241,687	419,825	272,193	287,948
Total current farm liabilities	677,217	898,211	702,694	1,134,978	651,741	661,445
Total intermediate farm liab	847,566	1,176,539	992,657	1,716,972	702,475	636,105
Total long term farm liabilities	1,884,979	2,128,647	1,952,165	1,921,840	1,817,793	2,335,454
Total farm liabilities	3,409,762	4,203,397	3,647,515	4,773,790	3,172,009	3,633,004
Total nonfarm liabilities	67,577	65,744	18,035	16,406	117,118	115,083
Total liabilities	3,477,339	4,269,142	3,665,550	4,790,196	3,289,127	3,748,087
Net worth (farm and nonfarm)	6,479,564	6,576,739	5,197,762	5,043,851	7,761,366	8,109,628
Net worth change		97,176		-153,911		348,262
Percent net worth change		1 %		-3 %		4 %
Ratio Analysis						
Current farm liabilities / assets	28 %	42 %	37 %	73 %	22 %	24 %
Intermediate farm liab. / assets	22 %	27 %	27 %	39 %	18 %	15 %
Long term farm liab. / assets	56 %	54 %	60 %	50 %	52 %	57 %
Total debt to asset ratio	35 %	39 %	41 %	49 %	30 %	32 %

Table 69

Balance Sheet at Market Values
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		Low 50%		High 50%	
	All Farms					
Number of farms	21		10		11	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	331,944	346,740	150,419	119,357	496,966	553,453
Prepaid expenses & supplies	374,601	226,411	353,938	218,980	393,384	233,166
Growing crops	54,845	49,960	47,319	43,329	61,686	55,988
Accounts receivable	322,944	202,395	364,068	234,213	285,558	173,469
Hedging accounts	0	929	0	1,950	0	0
Crops held for sale or feed	1,113,451	1,151,754	953,283	890,015	1,259,058	1,389,699
Crops under government loan	0	4,167	0	8,750	0	0
Market livestock held for sale	95,633	81,550	24,884	31,185	159,951	127,336
Other current assets	14,793	22,568	851	935	27,468	42,234
Total current farm assets	2,308,210	2,086,473	1,894,762	1,548,714	2,684,071	2,575,345
Intermediate Farm Assets						
Breeding livestock	2,329,649	2,590,326	2,333,385	2,738,968	2,326,252	2,455,196
Machinery and equipment	1,912,982	2,141,136	1,391,981	1,550,988	2,386,619	2,677,634
Titled vehicles	19,538	25,872	27,015	24,955	12,741	26,706
Other intermediate assets	235,414	263,591	168,413	210,233	296,324	312,099
Total intermediate farm assets	4,497,583	5,020,925	3,920,794	4,525,144	5,021,936	5,471,635
Long Term Farm Assets						
Farm land	3,702,770	4,035,553	2,741,864	2,804,645	4,576,321	5,154,559
Buildings and improvements	2,415,825	2,876,689	2,250,702	2,800,949	2,565,937	2,945,544
Other long-term assets	42,760	43,957	59,850	56,507	27,224	32,549
Total long-term farm assets	6,161,355	6,956,199	5,052,416	5,662,102	7,169,482	8,132,651
Total Farm Assets	12,967,148	14,063,597	10,867,973	11,735,960	14,875,488	16,179,631
Total Nonfarm Assets	388,526	414,946	95,161	98,704	655,222	702,438
Total Assets	13,355,673	14,478,543	10,963,133	11,834,664	15,530,710	16,882,069
Liabilities						
Current Farm Liabilities						
Accrued interest	3,533	6,065	3,632	9,152	3,443	3,258
Accounts payable	182,523	181,722	213,753	287,576	154,132	85,491
Current notes	219,287	332,376	243,622	413,825	197,163	258,332
Government crop loans	0	2,190	0	4,600	0	0
Principal due on term debt	253,169	351,296	241,687	419,825	263,607	288,996
Total current farm liabilities	658,511	873,649	702,694	1,134,978	618,345	636,078
Total intermediate farm liabs	833,689	1,140,014	992,657	1,716,972	689,173	615,507
Total long term farm liabilities	1,900,018	2,191,743	1,952,165	1,921,840	1,852,611	2,437,110
Total farm liabilities	3,392,218	4,205,407	3,647,515	4,773,790	3,160,129	3,688,695
Total nonfarm liabilities	64,359	62,614	18,035	16,406	106,471	104,621
Total liabs excluding deferreds	3,456,576	4,268,021	3,665,550	4,790,196	3,266,600	3,793,315
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	3,456,576	4,268,021	3,665,550	4,790,196	3,266,600	3,793,315
Net worth (farm and nonfarm)	9,899,097	10,210,522	7,297,583	7,044,468	12,264,110	13,088,754
Net worth excluding deferreds	9,899,097	10,210,522	7,297,583	7,044,468	12,264,110	13,088,754
Net worth change		311,425		-253,115		824,644
Percent net worth change		3 %		-3 %		7 %
Ratio Analysis						
Current farm liabilities / assets	29 %	42 %	37 %	73 %	23 %	25 %
Intermediate farm liab. / assets	19 %	23 %	25 %	38 %	14 %	11 %
Long term farm liab. / assets	31 %	32 %	39 %	34 %	26 %	30 %
Total debt to asset ratio	26 %	29 %	33 %	40 %	21 %	22 %
Debt to assets excl deferreds	26 %	29 %	33 %	40 %	21 %	22 %

Table 70

Statement Of Cash Flows
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Beginning cash (farm & nonfarm)	331,944	150,419	496,966
Cash Provided By Operating Activities			
Gross cash farm income	4,907,200	4,736,855	5,062,059
Total cash farm expense	-4,138,894	-4,225,889	-4,059,807
Net cash from hedging transactions	899	1,888	-
Cash provided by operating	769,205	512,854	1,002,251
Cash Provided By Investing Activities			
Sale of breeding livestock	85,794	171,047	8,292
Sale of machinery & equipment	12,753	10,031	15,227
Sale of titled vehicles	-	-	-
Sale of farm land	6,391	-	12,201
Sale of farm buildings	538	396	667
Sale of other farm assets	56,657	59,976	53,640
Sale of nonfarm assets	95	-	182
Purchase of breeding livestock	-285,653	-538,002	-56,245
Purchase of machinery & equip.	-426,130	-401,560	-448,467
Purchase of titled vehicles	-	-	-
Purchase of farm land	-235,876	-85,056	-372,986
Purchase of farm buildings	-492,634	-640,602	-358,117
Purchase of other farm assets	-110,280	-96,352	-122,941
Purchase of nonfarm assets	-4,203	-	-8,024
Cash provided by investing	-1,392,548	-1,520,123	-1,276,571
Cash Provided By Financing Activities			
Money borrowed	1,396,138	1,693,342	1,125,952
Principal payments	-588,615	-652,640	-530,411
Personal income	30,486	5,558	53,148
Family living/owner withdrawals	-169,062	-92,758	-238,428
Income and social security tax	-39,805	-	-75,992
Capital contributions	24,530	22,704	26,189
Capital distributions	-15,518	-	-29,625
Dividends paid	-	-	-
Cash gifts and inheritances	-	-	-
Gifts given	-15	-	-28
Other cash flows	-	-	-
Cash provided by financing	638,140	976,206	330,806
Net change in cash balance	14,797	-31,063	56,487
Ending cash (farm & nonfarm)	346,740	119,357	553,453
Discrepancy	0	0	0

Table 71

Financial Standards Measures
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Liquidity			
Current ratio	2.39	1.36	4.05
Working capital	1,212,824	413,736	1,939,267
Working capital to gross inc	25.0 %	9.0 %	38.1 %
Solvency (market)			
Farm debt to asset ratio	30 %	41 %	23 %
Farm equity to asset ratio	70 %	59 %	77 %
Farm debt to equity ratio	0.43	0.69	0.30
Profitability (cost)			
Rate of return on farm assets	2.6 %	-0.3 %	5.0 %
Rate of return on farm equity	1.6 %	-4.2 %	5.6 %
Operating profit margin	7.0 %	-0.9 %	13.1 %
Net farm income	263,947	-92,959	620,854
EBITDA	753,944	339,154	1,168,734
Repayment Capacity			
Capital debt repayment capacity	535,510	231,131	812,219
Capital debt repayment margin	126,650	-175,973	401,762
Replacement margin	43,395	-228,224	290,321
Term debt coverage ratio	1.31	0.57	1.98
Replacement coverage ratio	1.09	0.50	1.56
Efficiency			
Asset turnover rate (cost)	36.6 %	34.5 %	38.4 %
Operating expense ratio	85.2 %	92.6 %	79.1 %
Depreciation expense ratio	6.4 %	5.4 %	7.3 %
Interest expense ratio	3.2 %	4.0 %	2.5 %
Net farm income ratio	5.2 %	-2.0 %	11.1 %

Table 72

Operator and Labor Information
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Operator Information			
Average number of operators	1.8	1.5	2.0
Average age of operators	51.0	54.7	48.5
Average number of years farming	22.5	25.1	20.8
Results Per Operator			
Working capital	688,360	275,824	969,634
Total assets (market)	8,217,551	7,889,776	8,441,034
Total liabilities	2,422,390	3,193,464	1,896,658
Net worth (market)	5,795,161	4,696,312	6,544,377
Net worth excl deferred liabs	5,795,161	4,696,312	6,544,377
Gross farm income	2,757,036	3,065,886	2,546,457
Total farm expense	2,614,362	3,127,858	2,264,251
Net farm income from operations	142,674	-61,973	282,206
Net nonfarm income	17,303	3,705	26,574
Family living & tax withdrawals	118,546	61,839	157,210
Total acres owned	526.6	448.5	580.0
Total crop acres	1,030.4	1,115.4	972.4
Crop acres owned	555.1	484.0	603.6
Crop acres cash rented	473.6	627.4	368.8
Crop acres share rented	1.6	4.0	-
Total pasture acres	7.2	1.0	11.4
Labor Analysis			
Number of farms	21	10	11
Total unpaid labor hours	5,419	5,100	5,709
Total hired labor hours	41,142	40,194	42,004
Total labor hours per farm	46,561	45,294	47,713
Unpaid hours per operator	3,076	3,400	2,854
Value of farm production / hour	77.82	70.86	83.83
Net farm income / unpaid hour	46.39	-18.23	98.87
Average hourly hired labor wage	16.68	16.52	16.82
Partnerships & LLCs			
Number of farms	16	8	8
Number of operators	1.9	1.5	2.4
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-

Table 73

Financial Summary
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		
	All Farms	Low 50%	High 50%
Number of farms	21	10	11
Income Statement			
Gross cash farm income	4,907,200	4,736,855	5,062,059
Total cash farm expense	4,138,894	4,225,889	4,059,807
Net cash farm income	768,306	510,966	1,002,251
Inventory change	-204,367	-356,313	-66,234
Depreciation	-312,561	-247,612	-371,605
Net farm income from operations	251,378	-92,959	564,413
Gain or loss on capital sales	-	-	-
Average net farm income	251,378	-92,959	564,413
Median net farm income	264,406	39,535	544,609
Profitability (cost)			
Rate of return on assets	2.6 %	-0.3 %	5.0 %
Rate of return on equity	1.6 %	-4.2 %	5.6 %
Operating profit margin	6.8 %	-0.9 %	12.4 %
Asset turnover rate	37.9 %	34.5 %	40.7 %
Profitability (market)			
Rate of return on assets	3.5 %	-1.1 %	6.5 %
Rate of return on equity	3.2 %	-4.4 %	7.3 %
Operating profit margin	12.9 %	-4.0 %	25.2 %
Asset turnover rate	26.8 %	28.4 %	25.8 %
Liquidity & Repayment (end of year)			
Current assets	2,086,473	1,548,714	2,575,345
Current liabilities	873,649	1,134,978	636,078
Current ratio	2.39	1.36	4.05
Working capital	1,212,824	413,736	1,939,267
Working capital to gross inc	25.0 %	9.0 %	38.1 %
Term debt coverage ratio	1.31	0.57	1.98
Replacement coverage ratio	1.09	0.50	1.56
Term debt to EBITDA	4.02	8.68	2.56
Solvency (end of year at cost)			
Number of farms	20	10	10
Total assets	10,845,881	9,834,047	11,857,715
Total liabilities	4,269,142	4,790,196	3,748,087
Net worth	6,576,739	5,043,851	8,109,628
Net worth change	97,176	-153,911	348,262
Farm debt to asset ratio	40 %	49 %	33 %
Total debt to asset ratio	39 %	49 %	32 %
Change in earned net worth %	1 %	-3 %	4 %
Solvency (end of year at market)			
Number of farms	21	10	11
Total assets	14,478,543	11,834,664	16,882,069
Total liabilities	4,268,021	4,790,196	3,793,315
Net worth	10,210,522	7,044,468	13,088,754
Total net worth change	311,425	-253,115	824,644
Farm debt to asset ratio	30 %	41 %	23 %
Total debt to asset ratio	29 %	40 %	22 %
Change in total net worth %	3 %	-3 %	7 %
Nonfarm Information			
Net nonfarm income	30,486	5,558	53,148
Crop Acres			
Total crop acres	1,815	1,673	1,945
Total crop acres owned	978	726	1,207
Total crop acres cash rented	834	941	738
Total crop acres share rented	3	6	-
Machinery value per crop acre	1,129	895	1,312

Table 74

Summary Farm Income Statement
2015 MI Dairy Herds (450+ Cows)
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Crop sales	325,859	148,357	487,225
Crop inventory change	40,277	-59,123	130,641
Gross crop income	366,137	89,234	617,866
Livestock sales	3,916,434	3,968,551	3,869,054
Livestock inventory change	-14,084	6,301	-32,615
Gross livestock income	3,902,350	3,974,852	3,836,440
Government payments	61,225	60,859	61,559
Other cash farm income	603,681	559,088	644,221
Change in accounts receivable	-120,549	-129,855	-112,089
Gain or loss on hedging accounts	1,828	3,838	-
Change in other assets	-18,712	2,185	-37,709
Gain or loss on breeding lvst	61,675	38,628	82,627
Gross farm income	4,857,635	4,598,828	5,092,915
Cash operating expenses	3,987,320	4,046,903	3,933,154
Change in prepaids and supplies	148,190	134,959	160,218
Change in growing crops	4,884	3,990	5,698
Change in accounts payable	-801	73,823	-68,641
Depreciation	312,561	247,612	371,605
Total operating expense	4,452,154	4,507,286	4,402,034
Interest paid	151,574	178,986	126,653
Change in accrued interest	2,529	5,515	-185
Total interest expense	154,103	184,502	126,468
Total expenses	4,606,257	4,691,787	4,528,502
Net farm income from operations	251,378	-92,959	564,413
Gain or loss on capital sales	-	-	-
Net farm income	251,378	-92,959	564,413